

TOTO®

Standard EcoPower® Faucet 0.35 GPM  
TEL103 Series\*

TEL103-D20E - 20 second-cycle on-demand (0.12 gpc)

Ideal for high-traffic commercial spaces, the TOTO Standard EcoPower sensor faucets provide an elegant water conservation solution for LEED option. Powered by water, EcoPower's turbine creates an electrical current that is stored in rechargeable cells to power the Smart Sensor System of the faucet.

\* TEL103-D10E, 10 second cycle is not available for purchase



Performance Dashboard

Features & functionality

- Hydropower self generating system
- No minimum daily usage requirement
- Micro-sensor positioned underneath the spout head for accurate hand detection ensuring smooth and consistent water distribution
- Durable chrome plated spout body
- Single-hole mount
- Kit includes spout body, controller box, and mounting hardware – less supply lines
- Equipped with 0.35gpm flow control
- Mixing valve options available

Visit TOTO for more product specifications:

[TEL103 Series](#)

[See ecomedes for water & energy calculations](#)

CSI MasterFormat™ #22 42 39

[Check specs sheet for this product](#)

For spec help call (888) 295-8134

Environmental performance

Improved by:

- Powered by the sheer force of running water
- See [How we make it greener](#) for water savings information
- Metal parts and electric components are recyclable at the end of service

Certifications, rating systems & disclosures:

- 30% below the LEED V4's baseline with its 0.35gpm
- Contributes to earning credits in LEED®
- CALGreen® compliant
- Declare™ Label

[See LCA results & interpretation](#)

[See material health results & interpretation](#)



**ECO-POWER® SELF-SUSTAINING FAUCETS**

- Powered by water to create an electrical current that is stored in rechargeable cells to power the Smart Sensor System of the faucet or valve.
- Reduces electricity use, lower maintenance costs and hands-free, automatic-shut-off functionality.



SM Transparency Report™ + Material Health Overview™

VERIFICATION

LCA

3rd party reviewed



Transparency Report

Verified



Material Health Evaluation

Self-declared



Validity: 10/16/2017 – 10/16/2022  
TOT – 10/16/2017 – 028

The LCA and Report are independently reviewed and verified to the SM Transparency Report Framework and ISO 14025.

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The material health evaluation is self-declared and done in accordance with the Manufacturers Guide to Declare.

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## LCA results & interpretation

## Standard EcoPower® 0.35 GPM Faucet TEL103 Series

### Life cycle assessment

### Material health

#### Scope and summary

- Cradle to gate  Cradle to gate with options  Cradle to grave

#### Functional unit

**Reference service life: 3 years.** One faucet in an average U.S. commercial environment for 3 years. The period of 3 years is modeled as the period of application based on the average technical lifespan for commercial applications. The economical lifespan of commercial applications can be longer or shorter due to aesthetic replacements or more intense use. The implication is that the LCA model assumes that the application ends at year 3 and that the materials will be treated in an end-of-life scenario.

#### Data reporting period: 2016

#### Default use phase scenario

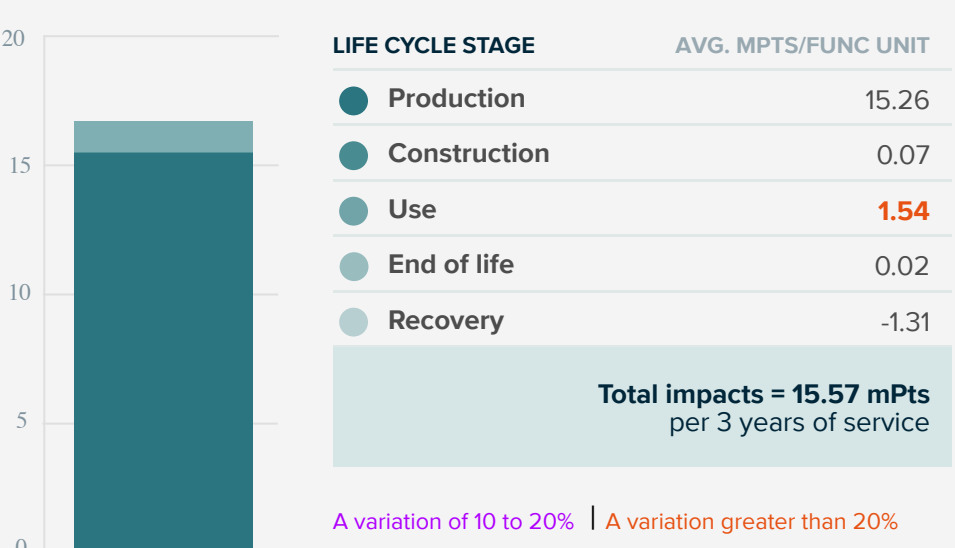
\* TEL103-D10E: 3 years of service in an average U.S. commercial environment with 0.06 gallon/use and 90 uses/day resulting in 4,212 gallons of water.  
TEL103-D20E: 3 years of service in an average U.S. commercial environment with 0.12 gallon/use and 90 uses/day resulting in 8,424 gallons of water.

\* Not available for purchase

#### Material composition greater than 1% by weight

PART	MATERIAL	AVG. % WT.
Spout body	Brass (C36000)	15.0%
Packaging	Cardboard	12.4%
Controller box cover	ABS	12.0%
Spout mounting bracket	Stainless steel, SUS303	7.4%
Spout mounting nut	Brass	5.9%
Spout mounting rod	Stainless steel, SUS304	5.6%
Hose	PVC	5.6%
Controller adapter	Brass, Pb free	4.9%
Controller mounting bracket	Stainless steel, SUS303	2.5%
Generator coil	Copper	2.1%
Connector	Polypropylene	2.0%
Nozzle base	Polyacetal	1.9%
Spout aerator gasket	NBR	1.9%
Spout nozzle key	Brass	1.9%
Hose clip	Steel	1.9%
Board	Electronics	1.3%
Generator coil cover	Brass	1.3%
Generator base	PPO	1.1%
Solenoid coil	Copper	1.1%
Controller cover	ABS	1.0%
	Other	11.4%

#### Total impacts by life cycle stages [mPts/func unit]



## LCA results

LIFE CYCLE STAGE	PRODUCTION	CONSTRUCTION	USE	END OF LIFE	RECOVERY
<b>Information modules: Included</b>   Excluded	<b>A1 Raw Materials</b>	<b>A4 Transportation/Delivery</b>	<b>B1 Use</b>	<b>C1 Deconstruction/Demolition</b>	<b>D Reuse, recovery and/or recycling</b>
*Installation and deconstruction/demolition are mostly manual. The sanitary fittings should not need repair, maintenance or replacement during the modeled life time.	<b>A2 Transportation</b>	<b>A5 Construction/Installation</b>	<b>B2 Maintenance</b>	<b>C2 Transportation</b>	
Reuse and energy recovery are not modeled for sanitary fittings.	<b>A3 Manufacturing</b>		<b>B3 Repair</b>	<b>C3 Waste processing</b>	
			<b>B4 Replacement</b>	<b>C4 Disposal</b>	
			<b>B5 Refurbishment</b>		
			<b>B6 Operational energy use</b>		
			<b>B7 Operational water use</b>		

### SM 2013 Learn about SM Single Score results

Impacts per 3 years of service	15.26 mPts	0.07 mPts	1.54 mPts	0.02 mPts	-1.31 mPts
<b>Materials or processes contributing &gt;20% to total impacts in each life cycle stage</b>	Brass parts together with the printed wiring board in addition to manufacturing processes such as brass turning.	Transportation of the product to the installation site or consumer and disposal of packaging.	Volume of water use during the operation of the product and the embedded energy use in the water used.	Transport to waste processing, waste processing and disposal of material flows transported to a landfill.	Plastic and metal components' recycling processes.

### TRACI v2.1 results per one faucet

A variation of 10 to 20% | A variation greater than 20%

LIFE CYCLE STAGE	PRODUCTION	CONSTRUCTION	USE	END OF LIFE	RECOVERY	
<b>Ecological damage</b>						
Impact Category	Unit					
<b>Acidification</b>	kg SO <sub>2</sub> eq	8.40E-01	7.04E-03	1.11E-01	-1.01E-02	-1.68E-02
<b>Eutrophication</b>	kg N eq	4.56E-01	6.89E-04	1.23E-02	-3.55E-03	-5.14E-03
<b>Global warming (Embodied carbon)</b>	kg CO <sub>2</sub> eq	6.45E+01	7.85E-01	2.14E+01	-8.85E-01	-1.81E+00
<b>Ozone depletion</b>	kg CFC-11 eq	4.17E-06	1.72E-09	9.68E-07	-3.49E-08	-9.39E-08
<b>Human health damage</b>						
Impact Category	Unit					
<b>Carcinogenics</b>	CTU <sub>h</sub>	2.88E-06	8.88E-09	4.39E-07	-1.84E-07	-4.31E-07
<b>Non-carcinogenics</b>	CTU <sub>h</sub>	8.77E-05	8.30E-08	1.81E-06	-4.58E-06	-5.78E-06
<b>Respiratory effects</b>	kg PM <sub>2.5</sub> eq	1.02E-01	1.25E-04	7.51E-03	-1.83E-03	-3.39E-03
<b>Smog</b>	kg O <sub>3</sub> eq	6.26E+00	2.25E-01	1.02E+00	-1.05E-01	-1.95E-01
<b>Additional environmental information</b>						
Impact Category	Unit					
<b>Ecotoxicity</b>	CTU <sub>e</sub>	2.37E+02	1.57E+00	7.37E+00	-7.32E+00	-1.12E+01
<b>Fossil fuel depletion</b>	MJ surplus	4.11E+01	1.13E+00	1.29E+01	-9.67E-01	-1.94E+00

## References

**LCA Background Report**  
TOTO Sanitary Fittings Products LCA Background Report (public version), September 2017

**SM Transparency Report Framework**  
**Part A:** LCA Calculation Rules and Background Report Requirements v2017 (compliant with ISO14040-44 and ISO14025)  
**Part B:** Product Group Definition – Commercial Lavatory Faucets

Transparency Reports™ / environmental product declarations enable purchasers and users to compare the potential environmental performance of products on a life cycle basis. They are designed to present information transparently to make the limitations of comparability more understandable. TRs/EPDs of products that conform to the same PCR and include the same life cycle stages, but are made by different manufacturers, may not sufficiently align to support direct comparisons. They therefore, cannot be used as comparative assertions unless the conditions defined in ISO 14025 Section 6.7.2: 'Requirements for Comparability' are satisfied.

## Rating systems

The intent is to reward project teams for selecting products from manufacturers who have verified improved life-cycle environmental performance.

### LEED BD+C: New Construction | v4 - LEED v4

Building product disclosure and optimization

### Environmental product declarations

- Industry-wide (generic) EPD 1/2 product  
 Product-specific Type III EPD 1 product

### Green Globes for New Construction and Sustainable Interiors

#### Materials and resources

- NC 3.5.1.2 Path B: Prescriptive Path for Building Core and Shell  
 C 3.5.2.2 and SI 4.1.2 Path B: Prescriptive Path for Interior Fit-outs

### Collaborative for High Performance Schools National Criteria

#### MW 7.1 – Environmental Product Declarations

- Third-party certified type III EPD 2 points

## SM Transparency Report™ + Material Health Overview™

<b>VERIFICATION</b>	LCA
3rd party reviewed	<input checked="" type="checkbox"/> NSF
Transparency Report	
Verified	<input checked="" type="checkbox"/> NSF
Material Health Evaluation	
Self-declared	<input checked="" type="checkbox"/>

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## How we make it greener

## Standard EcoPower® 0.35 GPM Faucet TEL103 Series

Collapse all

See LCA results by life cycle stage

### CONSTRUCTION

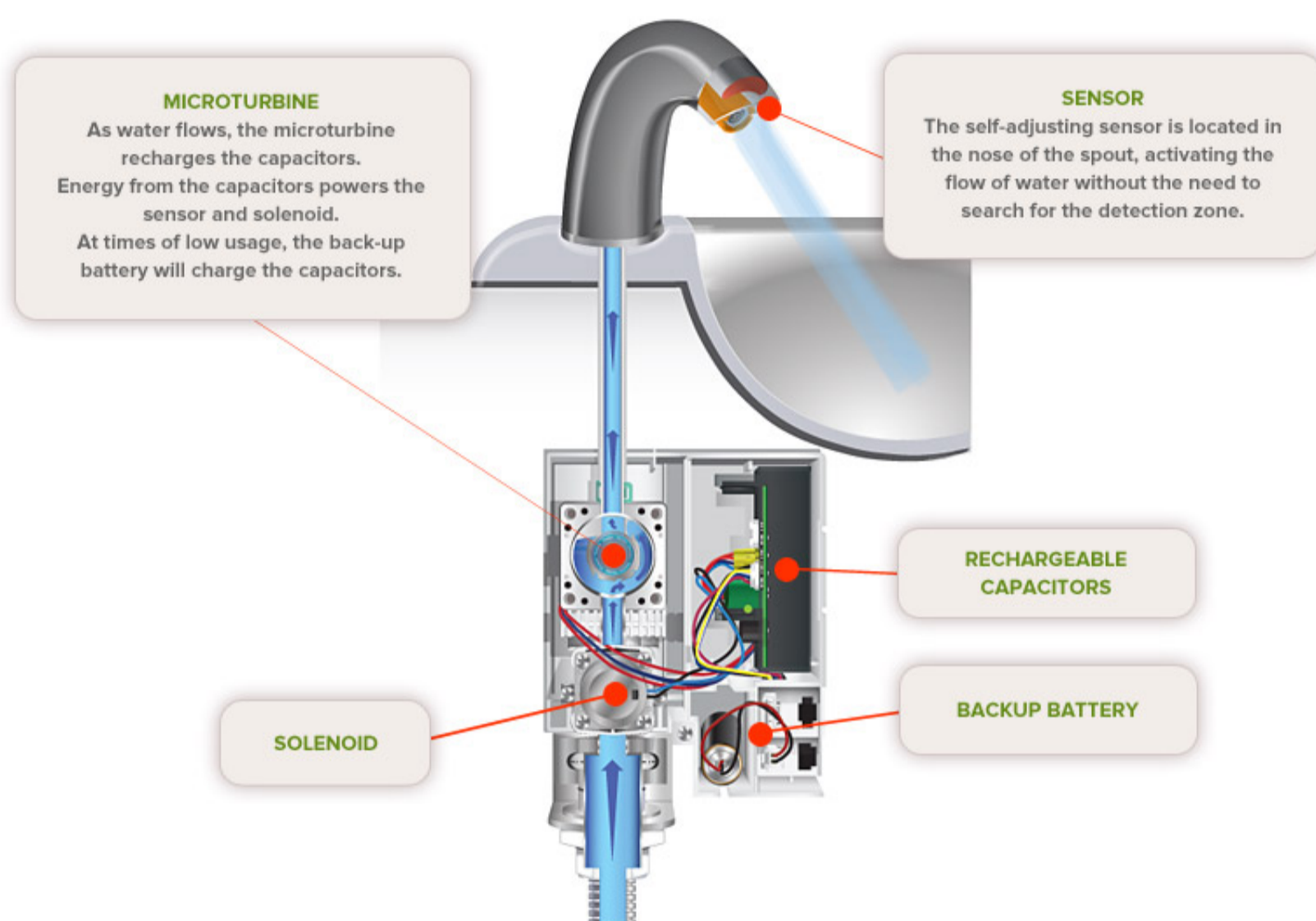


TOTO participates in the UPS Carbon Neutral program. TOTO is a certified SmartWay partner.

### USE



TOTO's Standard EcoPower® Faucets feature the highly regarded EcoPower technology. Engineered to reduce environmental impacts, TOTO's EcoPower products offer water and energy savings without sacrificing performance. Below are some of the features of TOTO's EcoPower technology.



#### SENSOR:

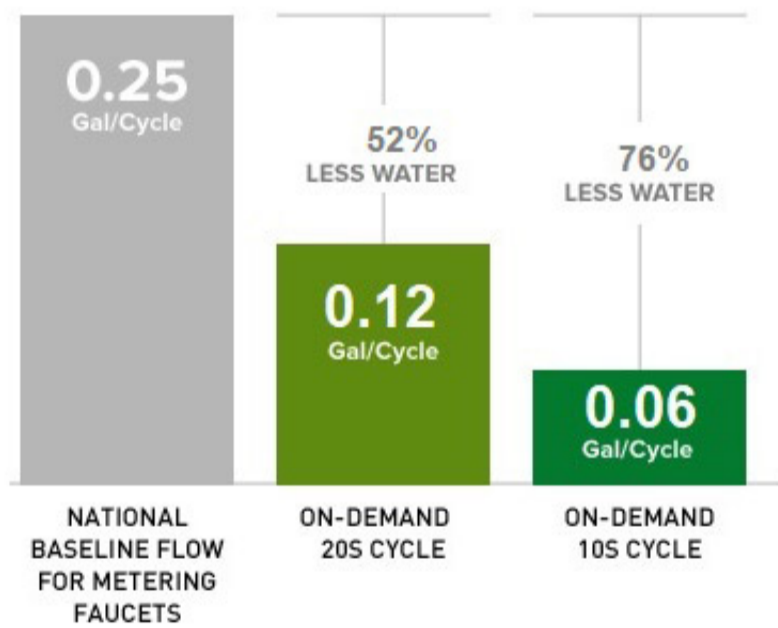
Located in the nose of the faucet, the EcoPower sensor ensures that water flows only when needed. The detection zone is right where you need it, eliminating the need to search with your hands to activate the flow of water. For on-demand versions, the sensor will stop the flow of water upon removal of the hands from the sensing zone, preventing wasted water.

#### MICROTURBINE:

TOTO's EcoPower technology enables the product to operate 100% off grid. As water flows, the hydro powered microturbine recharges the capacitors for the sensor and solenoid. Less reliance on the back-up battery results in much less battery waste.

#### SOLENOID:

The solenoid mechanism, a water-saving technology, maintains consistent flow rate under a range of supply pressures.



Using the same proven engineering as our legendary EcoPower TEL3/5G series, the low flow TEL103 series reinforces TOTO's performance reputation while offering additional water savings of 52% and 76%, respectively.

### END OF LIFE



Metal and electronic parts can be recycled at the end of life.

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