

2ND GENERATION

# Load Tap Changer Oil Filtration Systems

Reduce Oil-Related Maintenance Costs and Improve Reliability

Second generation oil filtration systems are designed to be installed on most LTC models to remove carbon and metallic particles produced during normal LTC operation, keeping oil in peak condition with minimal maintenance.



For flexible operation, the system includes an adjustable timer which allows customers to configure the system to their specifications — daily, every other day, weekly or every other week in intervals of two, four, eight and 24 hours. Since filter replacement does not require pump reversal or any disconnection of oil lines, the dirty oil stays in the filter while system oil stays clean and in peak condition (a convenient filter canister drain valve is included).

## 2ND GENERATION OIL FILTRATION SYSTEM: OF2

### Easier to Install and Maintain

Our standard OF2 system's design allows for easy installation and is equipped with a swing-out filter canister that makes filter replacements a quicker task.

### Unique High-Efficiency Filter Design with Tilt-Out Easy Filter Change System

Our depth-type filter uses a flow path parallel with the center tube instead of the conventional outside-to-inside flow. This flow path forces oil through a greater depth of filter material for more efficient filtration. *See back side for more information on this unique filter design and photo to the right demonstrating easy filter change-out process.*



### Minimum Turbulence in Reservoir

Pump maintains a flow rate of 1.0 GPM to minimize turbulence in the tank.

### Filter Adapter Kit Available for Alternate Style Manufacturer Cartridges

### More Economical

High efficiency filter reduces LTC mechanical wear which can minimize equipment failure and downtime. Economical purchase price combined with less frequent filter replacement can save you money.\*

\* Actual filter life varies depending on transformer loading and frequency of LTC operations and tap changer model.

## CUSTOMIZE YOUR OWN SYSTEM

OF2 oil filtration systems have been designed to meet the filtration demands of higher oil volume load tap changers while providing customization flexibility to meet individual customer specifications. The system is adaptable to a variety of industry standard filters and always ships complete with the following:

- 1/2 HP, fully enclosed, continuous run rated, auto-thermal, resetting motor
- High performance depth filter
- 5+ gallon leak-catch sump with sump alarm
- Low flow alarm
- High pressure alarm
- Anti-condensation cabinet heater
- Tilt-out, tool-free filter change system
- Visual flow indicator which can be monitored without opening the cabinet
- 0-160 psi, oil-filled pressure gauge
- Customer selectable run-time and interval timer
- Run-time bypass switch
- Remote system shutdown relay
- Heavy duty circuit breaker on incoming power
- 120 VAC operation

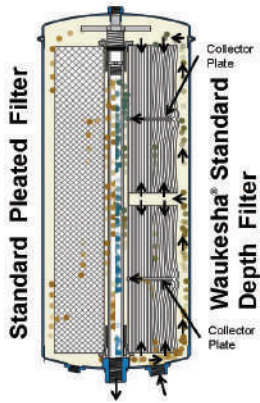
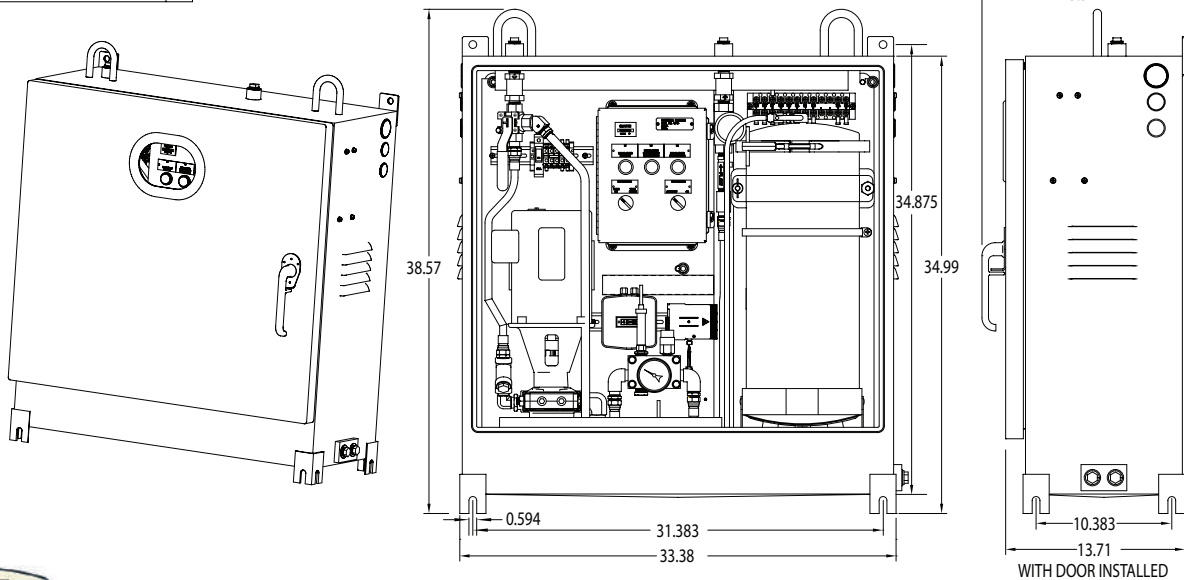
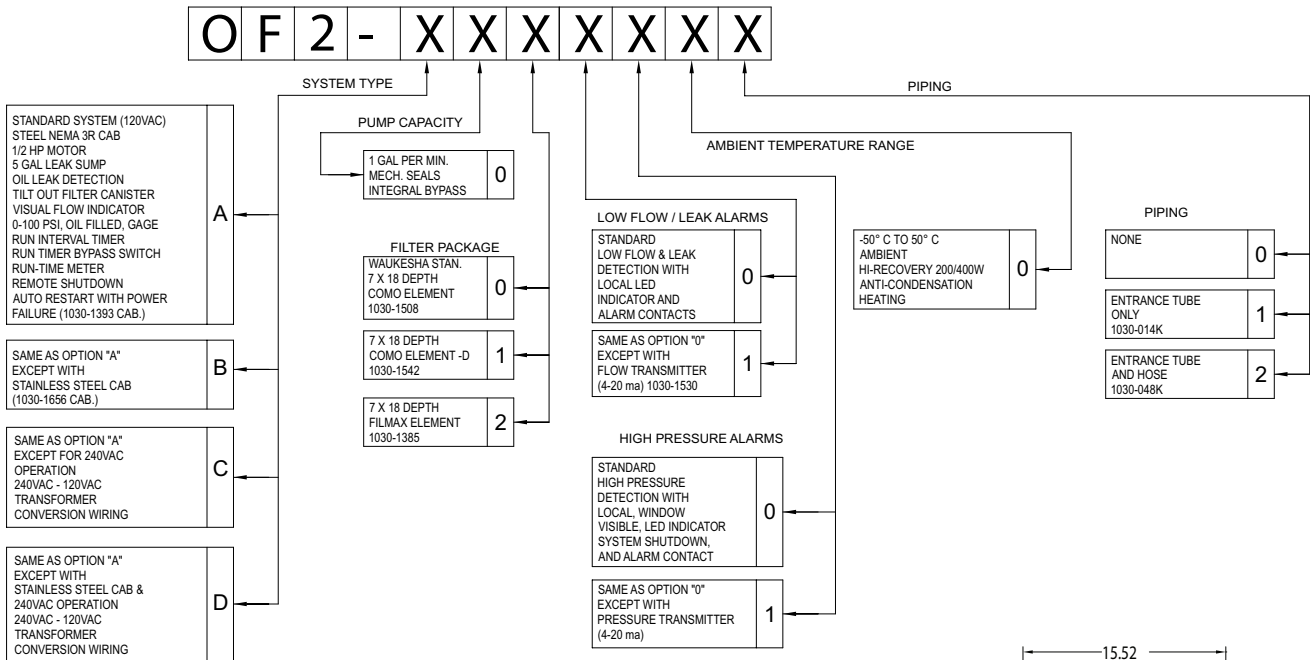
Particle/Moisture removal performance is dependent on make/model of customer-specified oil filter cartridge.

With the appropriate filter installed, the OF2 system can remove dissolved water, extremely fine carbon and metallic particles to maintain peak performance of LTC oil, extend the life of your equipment and lengthen the period between maintenance intervals.

## OPTIONAL FEATURES

- 240 VAC operation
- Alternate filter selection
- Additional 4-20 mA flow transmitter
- Additional 4-20 mA pressure transmitter
- Filter canister heater system
- LTC entrance tube with or without hose
- Stainless steel cabinet

# Build Your Own Part Number Using Configuration Below



## WAUKESHA® STANDARD FILTER OFFERS LONG FILTER ELEMENT LIFE

Waukesha® Components depth-type filter element (in Standard OF2 System) features a unique fluid flow path: fluid runs parallel with the center tube (axial flow) rather than the conventional outside-to-inside flow (radial flow) of most pleated-type filters. The depth of fluid flow is optimized and provides the capability to filter more efficiently than pleated-type filters. Filter media is constructed as four rolls of filter paper. Oil flows between the layers of media until it reaches one of two collector plates. The collector plates route oil to the center of the element where it is discharged out of the element. The depth filter media has a much greater resistance to flow from outside to center (radial flow) than it does between the layers (axial flow) of filter material. Integrity of the filter element is maintained even as it accumulates contaminants and the Delta-p [pressure across the filter] goes up. Hydraulic pressure of the fluid compressing the layers of media together prevents a channel from forming that could allow oil to pass through the element unfiltered.

### Removes Both Dirt and Moisture

- Filter material: Dried cellulose fiber
- Filter can decrease water to < 5 PPM
- Micron rating: 1.0; rated for particules as well as free and emulsified water
- Beta X rating: 75 at 3 microns
- Total water holding capacity: 0.5 kg
- High rate of absorption enables oil to be reduced from 200 to less than 5 PPM in one pass

Contact us for more information. To download a technical manual, field maintenance manual and/or technical paper, visit our website.

To continually improve its products and services, Prolec-GE Waukesha, Inc., reserves the right to change specifications and features without notice. Please contact us for certified dimensions and drawings.

**LOCATION**  
 Prolec-GE Waukesha, Inc.  
 9011 Governors Row  
 Dallas, TX 75247  
 800-338-5526

[waukeshacomponents.com](http://waukeshacomponents.com)

transformers | service | training | components

