The OF Series Oil Filters are designed to be installed in the oil line between the oil reservoir and the oil header on a refrigeration rack with a low pressure oil system. If the OF-303-BP is used on a low pressure oil system, it should be installed between the oil separator and oil reservoir. On a high pressure oil system, an OF Series Oil Filter would be installed between the oil separator/reservoir and the oil header.

**Location**

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**Typical Oil System (Low Pressure)**

**Installation and Replacement Instructions**

1. Close the appropriate shut-off valves to isolate the oil filter.

2. For the OF-303 and OF-303-BP, remove the seal caps and install the filter into the oil line. **Make sure the flow arrow printed on the product corresponds to oil flow.** The OF-303 and OF-303-BP Oil Filters can be installed in a vertical or horizontal position. Evacuate the oil line and the oil filter prior to opening the shut-off valves.

The OF-303 is a standard oil filter that incorporates a filter element with 325 square inches of surface area.
The OF-303-BP is similar to the OF-303 except the OF-303-BP has an oil bypass feature. The bypass feature is closed (normal position) as filtered oil flows through the element. (The bypass assembly uses a spring loaded teflon seat to ensure a tight seal.) In the event the filter element is plugged from solid contaminants, and a 30 psi differential exists across filter, the spring loaded oil bypass feature will open and allow oil flow. This will prevent system shutdown by the oil control.

Operation of the oil bypass feature in the OF-303-BP is applicable in system locations where a +30 psi drop is possible. Because of the oil bypass feature, we recommend replacing the OF-303-BP on a routine maintenance schedule.

3. For the ROF-413-T, after the appropriate shut-off valves are tightly closed, relieve system pressure by using the access valve on ROF-413-T end plate. Remove the end plate.

For new installations, inlet and outlet fittings are not supplied with a ROF-413-T. PURCHASE END PLATE FITTINGS SEPARATELY. Installation requires two fittings that connect to the 3/8” pipe threaded holes in the aluminum end plate. A Schrader type access valve is SUPPLIED with ROF-413-T. The valve allows for pressure relief within the canister when changing the OFE-1 Filter Element.

THE OFE-1 FILTER ELEMENT IS SOLD SEPARATELY. Remove the OFE-1 Filter Element from its packaging. Slide the filter element over the aluminum boss until the filter completely rests against the stop. For ease of assembly, lightly lubricate the filter O-Ring with system oil and install the filter on the end plate boss with a twisting motion.
Insert assembly into shell, replace flange bolts/nuts, tighten evenly to a recommended torque of 14 to 16 ft-lbs. Evacuate the oil line and the ROF-413-T to remove non-condensables. Add oil if necessary.

**CAUTION:**

The edge of the shell fits into the gasket groove on the end plate and makes a seal against the gasket to prevent leakage. Be careful not to scratch or damage the edge of shell when changing filters.

Do not replace the end plate gasket unless it is damaged. When replacement is necessary, use the gasket (Sporlan part number 1288-005) supplied in the OFE-1 Filter canister.

The OF-413 should be supported with an **A-175-1 Mounting Bracket** (sold separately). Each bracket is supplied with a bolt, nut, and washer. **ROF-413 must be installed vertically, with the end plate in the “up” position.** Removal of Mounting Bracket and/or connection of refrigerant grade hoses to inlet and outlet fittings on filter end plate allow for flexibility in changing the OFE-1 Filter Element.

**When to Change Filters**

Filters should be changed when they are severely contaminated or on a regular maintenance schedule. Disposal of filters should be handled according to local laws.

System variances and multiple installation locations prohibit a recommended pressure drop value to be given. **The pressure differential across the OF Series Oil Filters should never exceed 45 psi.**

The **OF Series Oil Filters** are suitable for mineral, alkylbenzene, and POE oils in refrigerant systems. The oil filter elements are not suitable for ammonia systems.


<table>
<thead>
<tr>
<th>Filter Type</th>
<th>Safe Working Pressure</th>
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<tbody>
<tr>
<td></td>
<td>SI Units - kPa</td>
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<tr>
<td>OF-303, OF-303-BP</td>
<td>3447</td>
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<tr>
<td>ROF-413-T</td>
<td>2758</td>
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