

SERV-OIL Downstream Injection Lubricators for Equipment *except* Air Tools

Port Sizes: 1/2, 3/4



Model Shown: D64061

SPECIFICATIONS

Air Flow: Maximum inlet pressure of 150 psig (10 bar) and a pressure drop of 3 psi (0.2 bar):

1/2 NPTF — 4-60 scfm (2-28 dm³/s)
3/4 NPTF — 4-90 scfm (2-43 dm³/s)

Ambient/Media Temperature:
40° to 125°F (4° to 52°C).

Flow Valve: Zinc body.

Operating Pressure Range:
60-150 psig (4.1-10.3 bar)

Pulse Counter: Adjustable to operate the Servo-Meter on every cycle, every 5th cycle, or every 10th cycle.

Reservoir: Integral, unpressurized. 10-Ounce (300-ml) capacity transparent nylon with quick-fill cap. Optional M476R reservoir. Integral reservoir can be eliminated if a central-fill system is employed

Servo-Meter: Aluminum body; acetal end caps. 1-Drop rating; optional 1/2-drop or 2-drop rating. Transparent sight indicator gives visual verification of oil delivery.

Tubing: Optional 25 feet (8 meters) of oil-filled tubing and 420-160 check valve.

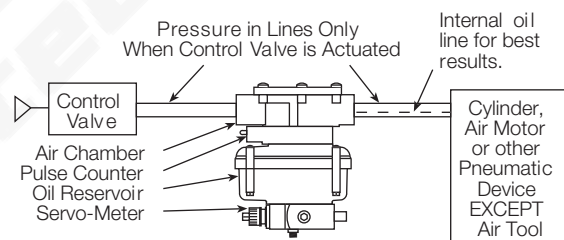
Oil Viscosity Range: 31-1000 @ 100°F (37.8°C)

The downstream injection lubricator is specifically designed to overcome the shortcomings of the conventional mist lubricator installed upstream of a control valve. Laboratory and field tests have shown that a mist lubricator installed in the conventional manner results in much of the lubricating oil being exhausted to atmosphere through the exhaust port of the control valve.

Oil that passes through the valve tends to coalesce and cling to the wall of the air line where it simply moves back and forth with each valve cycle.

The SERV-OIL downstream injection lubricator eliminates these shortcomings. It is installed downstream of the control valve and uses a small nylon line to carry the lubricant right to the desired lubrication point. This assures dependable lubrication for cylinders, air motors, or other pneumatic equipment.

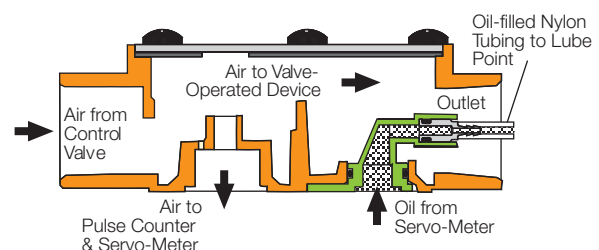
The downstream lubricator is not designed to work with air tools. For such applications see preceding pages .



Sub-Assemblies and Installation of Downstream Lubricator

The four sub-assemblies shown in the drawing above make up the downstream lubricator.

Air Chamber. The air line supplying the cylinder (or other device to be lubricated) is connected to the inlet port of the air chamber. 1/8-Inch nylon tubing is connected to the nozzle in the outlet port, and then runs inside the air line to within a short distance of the cylinder port. A check valve must be installed at the end of the tubing.



Air Chamber of Downstream Lubricator

Pulse Counter. When the control valve is actuated the pulse counter receives an air signal from the air chamber. A three-position switch on the counter is set to allow the air signal to proceed to the Servo-Meter on every cycle, every 5th cycle, or every 10th cycle. This is one of the means of controlling the amount of lubrication that will be dispensed by the Servo-Meter.

Servo-Meter. The Servo-Meter is an air-actuated, positive-displacement oil pump. It injects oil with each signal from the pulse counter. These signals can be every time, every 5th time, or every 10th time the control valve is actuated. The frequency is determined by the setting of the pulse counter.

To actuate the Servo-Meter the signal received must have a pressure of at least 60 psig (4 bar). When actuated the Servo-Meter delivers a precise amount of oil to the nozzle in the outlet port of the flow valve, and thus on to the lubrication point. A transparent sight indicator on one end of the Servo-Meter gives visual verification of oil delivery.

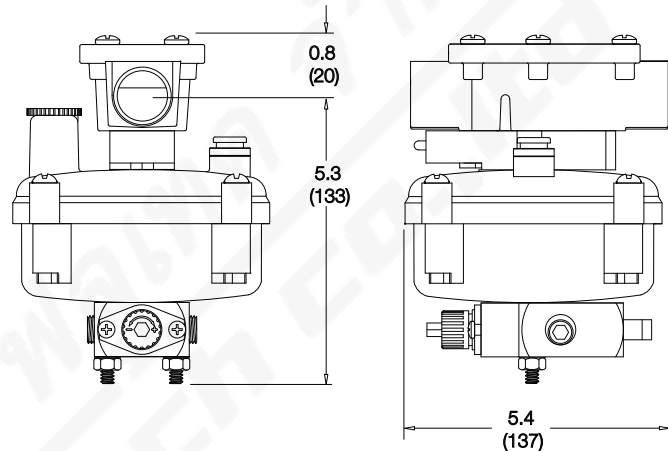
By means of the adjusting knob on the end of the Servo-Meter, oil delivery can be reduced in precise increments from of the maximum rating down to 10% of the maximum rating. (30% for 2 drop units)

Oil Reservoir. The integral oil reservoir is made of tough, transparent nylon, and has a capacity of 10 ounces (300 ml). It has a quick-fill cap, and since the reservoir is not

pressurized it can be filled at any time. It can also be used with a central-fill system. Gravity fill is recommended, but fill pressure can be up to 30 psig (2 bar).

A downstream lubricator can be ordered without an integral reservoir, in which case a sight-dome air eliminator is available for use with a central-fill system.

DIMENSIONS inches (mm)



ORDERING INFORMATION

Change the letters in the sample model number below to specify the downstream lubricator you want.

P D6 4 0 4 1 Y W

OIL-FILLED TUBING

With 25 ft (8 m) of tubing Leave Blank and 420-160 check valve.

Without tubing P

RESERVOIR

With integral reservoir 4

No integral reservoir. Also specify 0 if ordering M476R reservoir under OPTIONS at right 0

PORT SIZE

1/2 NPTF 4

3/4 NPTF 6

PORT TYPE

NPTF threads Leave Blank

BSPP threads W

OPTIONS (More than one option can be chosen)

None Leave Blank

Two pulse counters BB

Frequency controller F

M476R reservoir. Also specify 0

under RESERVOIR at left R

SERVO-METER RATING

One drop (0.030 ml) 1

Two drops (0.060 ml) 2

Half drop (0.015 ml) 5