## 4. Harvard corporation

## 1004 Element

## Description

- Removes contaminants as low as 1-micron
- Removes water and particles
- Does not remove or deplete additives

Used For

- Hydraulic Oil
- Engine Oil
- Transmission Oil
- Transformer Oil
- Cutting Oil
- Other medium viscosity oil-based lubricants
- Diesel Fuel


## Capacity \& Flow Rate

- Requires 20 Qt./18.9 L. of makeup fluid (housing volume)
- *Ideal sump range from 16-250 Gal./60.6-946.4 L.

Lube 16-22 Gal./60.6-83.3 L.
Hydraulic 151-250 Gal./571.6-946.4 L.

- **Flow rate: See chart


## Specifications

- Beta $_{3}=250$
- Max operating pressure 80 PSI
- Overall dimensions $19.75^{\prime \prime}$ (H), $7.5^{\prime \prime}$ (D)
- Fits part \# 900102, 900101, 900311, 900358, 900372, 900243, 900865, 900320, 900188, 900186, 900245, 900265, 900267, 900269, 900281, 900280, 900368, 900033, 900035

| 30 PSI | $70^{\circ} \mathrm{F} / 21.1^{\circ} \mathrm{C}$ | $104^{\circ} \mathrm{F} / 40^{\circ} \mathrm{C}$ | $150^{\circ} \mathrm{F} / 65.6^{\circ} \mathrm{C}$ |
| :---: | :---: | :---: | :---: |
| 46 | $1.25 \mathrm{G} / 4.73 \mathrm{~L}$ | $2.25 \mathrm{G} / 8.52 \mathrm{~L}$ | $4.38 \mathrm{G} / 16.56 \mathrm{~L}$ |
| 68 | $1.12 \mathrm{G} / 4.16 \mathrm{~L}$ | $1.63 \mathrm{G} / 8.52 \mathrm{~L}$ | $4 \mathrm{G} / 15.14 \mathrm{~L}$ |
| 100 | $.53 . \mathrm{G} / 2.01 \mathrm{~L}$ | $1.31 \mathrm{G} / 4.97 \mathrm{~L}$ | $3.38 \mathrm{G} / 12.78 \mathrm{~L}$ |
| 150 | $.44 \mathrm{G} / 1.66 \mathrm{~L}$ | $1.13 \mathrm{G} / 4.26 \mathrm{~L}$ | $2.88 \mathrm{G} / 10.88 \mathrm{~L}$ |

**Chart data G-Gallons Per Minute, L-Liters Per Minute

## Recommended Viscosities

- Diesel Fuel
- ISO: 46, 68, 100, 150
- SAE: 20, 30, 40

Harvard Corporation is able to meet many custom requirements, please contact us with you specific custom needs

- Used with petroleum or synthetic fluids \& diesel fuel

Notes

- **Flow rates are established using ISO 46-150 viscosity oils at the standard $40^{\circ} \mathrm{C} / 104^{\circ} \mathrm{F}$ and are subject to vary
- *Viscosity, operating temperature, and generated contamination will affect sizing and flow rates of filtration equipment
- Most applications, elements need to be changed between 500-1000 hours for optimal performance, ideally change the element when the flow is half the starting flow or the PSI is double the starting PSI
- The max dirt \& water capacities are determined when the flow is reduced by half the original flow (this is the optimal operating condition)

