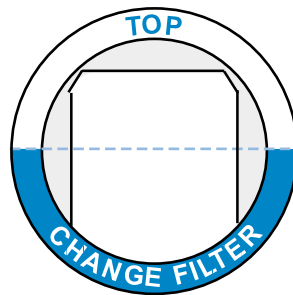


# How to read the Donaldson Visual Indicator

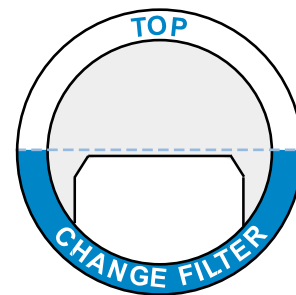
This simple device will tell you when the filter needs to be changed. Always check when the fluid is at operating temperature and the system is at normal operating flow.

If the top of the white panel is below the lower half of the window, the filter needs servicing.

Visual Indicators are found on these Donaldson filter assembly models: HAK05, HDK06, HFK08 & HEK11.



Filter OK



Filter Needs Service

# How Donaldson Derives Filter Performance Data

## Donaldson Testing Procedures

The numbers on the performance curves refer to specific Donaldson media formulations such as #1, #6, #20, etc. Beta ratings and part numbers specific to each media can be found on the individual filter pages of this catalog. All flow measurements were made with 32cSt [150 SSU] hydraulic oil at 100°F (37.7°C), fluid specific gravity of 0.9.

## Pressure Drop Calculation

Clean Filter Assembly = head  $\Delta P$  + element  $\Delta P$

## Calculation Definitions

- $\Delta P_E$  = Element pressure drop from curve
- $\Delta P_M$  = Corrected element pressure drop
- S.G. = New specific gravity
- SSU = New SSU viscosity (Saybolt Seconds Universal)
- cSt = New cSt viscosity (centistokes)
- cP = New cP viscosity (centipoise)

## Corrections

To correct element drops for viscosity and/or specific gravity, use one of these formulae:

- $\Delta P_M = \Delta P_E \times (SSU/150) \times (S.G./0.9)$
- or -
- $\Delta P_M = \Delta P_E \times (cSt/32) \times (S.G./0.9)$
- or -
- $\Delta P_M = \Delta P_E \times (cP/29)$

