

DT-350 In-Line Hydraulic Filter

Donaldson.

Features

The DT-350 T-type ported series offers flows to 50 gpm with 3 bypass options and conforms to the HF3 automotive standard. Our standard bowl drain plug helps relieve system pressure during filter change-outs. Donaldson Triboguard™ 5-layer media is offered in a variety of designs. Five different media grades are offered. Donaldson elements core collapse options range from 150 to 3,000 psi. The differential pressure indicator line is designed to work with the wide assortment of bypass valves. Thermal lockout and surge control are two key features incorporated in the differential indicators.

50 gpm (189 l/min)

Conforms to HF3 specifications

Wide range of indicator options

High collapse element available for use in non-bypass applications

Fluorocarbon seals standard

Technical Data

Max. Working Pressure	3,000 psi (210 bar)
Fatigue Pressure Rating	1,500 psi (100 bar)
Typical Burst Pressure	7,500 psi max (517 bar)
Operating Temp. Range	-20° to 250°F (-29° to 121°C)
Head Material	Cast Iron
Bowl Material	Steel
Weight (w/o elements)	Assembly length 4": 13 lbs (5,9 kg) Assembly length 8": 15 lbs (6,8 kg)

DT-350 series filter housing is a suitable replacement for competitor filter housings such as:

Pall 9650, Schroeder TF30, Parker 30P, Hydac LF



DT-350 Performance Data

Housing and Filter Element

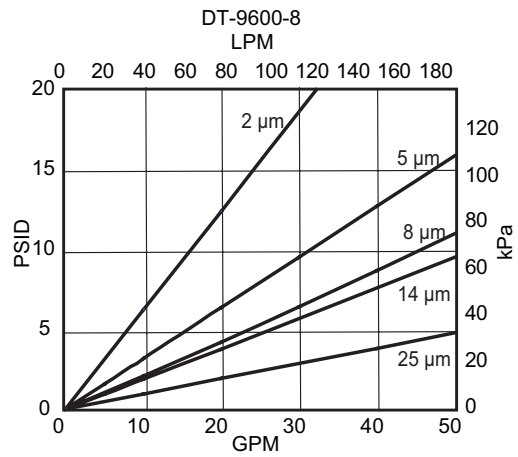
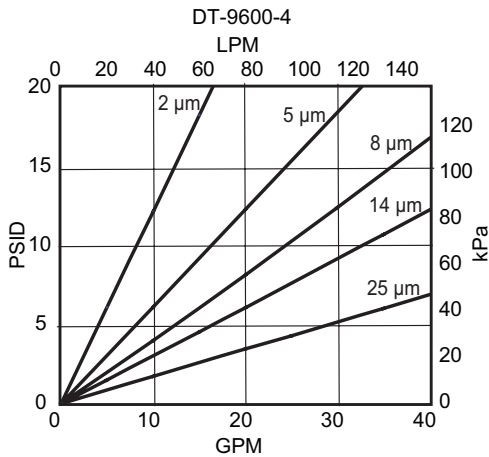
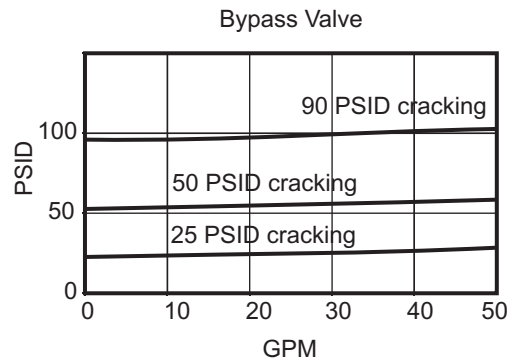
Flow versus Pressure Drop
150 SUS (32 cst.) oil with specific gravity ≤ 0.9

Viscosity Correction Formula

$$\Delta P \text{ Element} = \Delta P \text{ from curve} \times \frac{\text{New Viscosity (SUS)}}{150} \times \frac{\text{New Specific Gravity}}{0.90}$$

$$\Delta P \text{ Housing} = \Delta P \text{ from curve} \times \frac{\text{New Specific Gravity}}{0.90}$$

$$\Delta P \text{ Assembly} = \Delta P \text{ Element} + \Delta P \text{ Housing}$$



Example

Model	Housing Length	Bypass Valve	Indicator	Porting	Element Construction	Micron Rating
DT-350	1	A	B	B	A	14
	TABLE 1	TABLE 2	TABLE 3	TABLE 4	TABLE 5	TABLE 6

Housing shipped without element.

Select one option from each table below.

(See example shown above.)

TABLE 1
Housing Length

1	4"
2	8"

TABLE 2
Bypass Valve

A	No bypass
B	50 psid bypass
C	90 psid bypass

TABLE 3
Indicator

A	Visual Indicator 35 psid
C	Visual/Electrical 35 psid
B	Visual Indicator 70 psid
D	Visual/Electrical 70 psid
N	No indicator

TABLE 4
Porting

A	SAE-12 O-Ring
B	SAE-16 O-Ring

TABLE 5
Element Construction

A	Standard (200 psid)
B	High Collapse (3,000 psid)

TABLE 6
Micron Rating

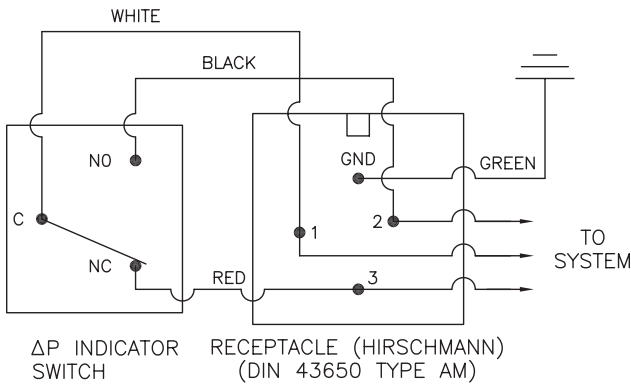
02	Beta 1,000 at < 4 micron
05	Beta 1,000 at 5 micron
08	Beta 1,000 at 8 micron
14	Beta 1,000 at 14 micron
25	Beta 1,000 at 25 micron

Please note: Element selection to be ordered separately.

Element Chart

Length	Construction	Micron Rating				
		02	05	08	14	25
1	A	DT-9600-4-2µm	DT-9600-4-5µm	DT-9600-4-8µm	DT-9600-4-14µm	DT-9600-4-25µm
	B		DT-9601-4-5µm		DT-9601-4-14µm	
2	A	DT-9600-8-2µm	DT-9600-8-5µm	DT-9600-8-8µm	DT-9600-8-14µm	DT-9600-8-25µm
	B		DT-9601-8-5µm		DT-9601-8-14µm	

Electric Indicator (Aluminum Housings) Schematic Wiring Diagram



Note: The female plug (connector) is to be furnished by customer

Differential Indicators

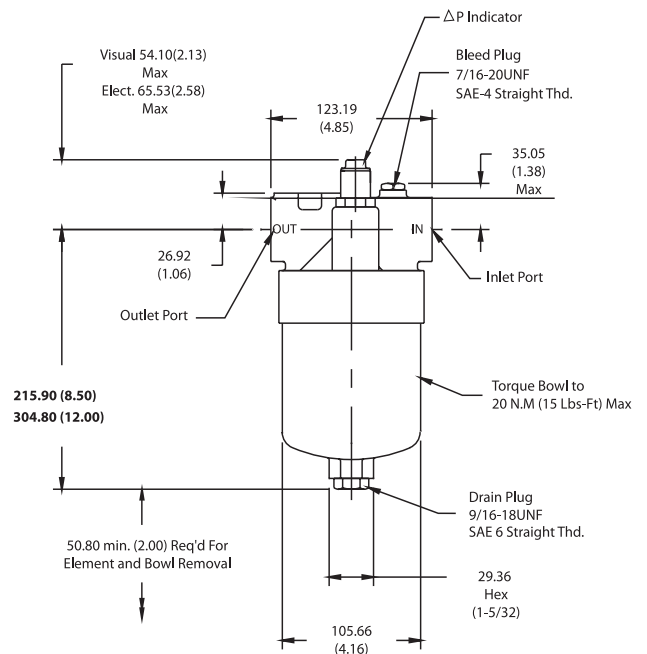
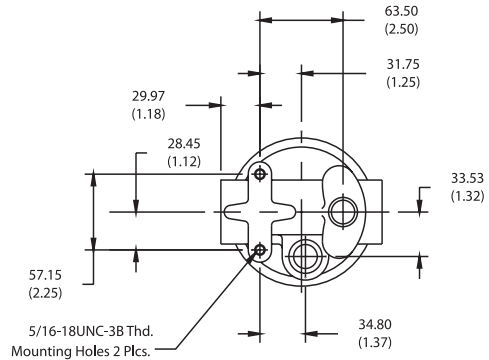
Indicators are designed to actuate at approximately 80% of bypass valve cracking pressure. It is recommended that an indicator with a bypass setting of 70 psid is used with a non-bypass housing.

Surge Control

This optional feature is used to dampen pressure surges or spikes to avoid premature actuation of the indicator. Surge control delays the indicator response.

Thermal Lockout

Thermal Lockout (TL), prevents actuation below 60°F and allows actuation above 100°F system operating temperature. Its purpose is to avoid false actuations during periods of high fluid viscosity such as experienced during cold start.



Dimensions: millimeter (inch)