



## In-Tank Filters Disposable Filter Cartridge Type

### Return Line Application

Model "LIT" Series LIT-500, 750, 1000

#### Specifications

- Working pressure 100 PSI (7 Bar)
- Operating Temperatures -22°F to +212°F (-32°C to +100°C)
- Flows to 25 GPM (96 LPM) Return
- 1/2", 3/4", 1", Ports Aluminum casting
- Buna Seals
- Compatible with mineral oils HH, HL, HM, HR, HV, HG according to ISO 6743/4
- Nylon bowl
- 3-10 (lbs), 1.4-4.5 (kgs) shipping weight
- 25 PSID. bypass option for return
- Magnet on lid

#### Options

- NPT or SAE Ports
- 10, 25 micron cellulose, synthetic elements
- Visual or electrical indicators
- Weld Riser Available for LIT-750, 1000 Series  
(see Tech Bull)



LIT-500/750/1000



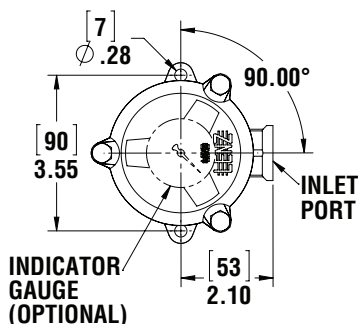
LIT-752-10



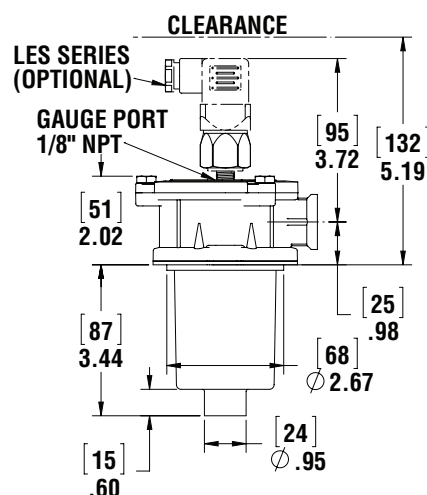
LIT-750-R-WR



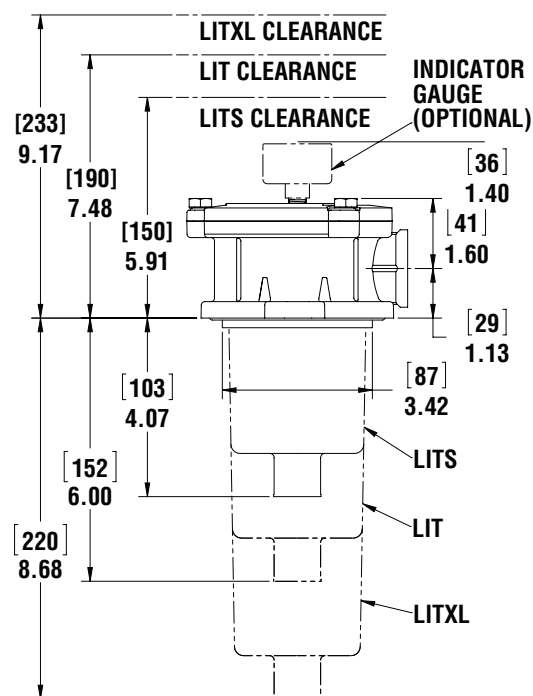
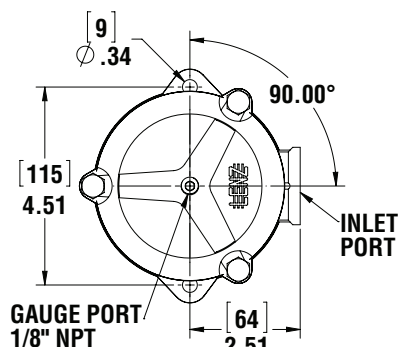
LITXL-1000



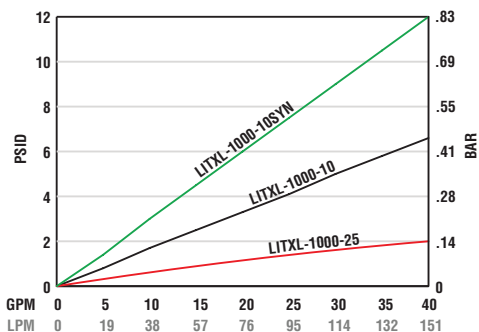
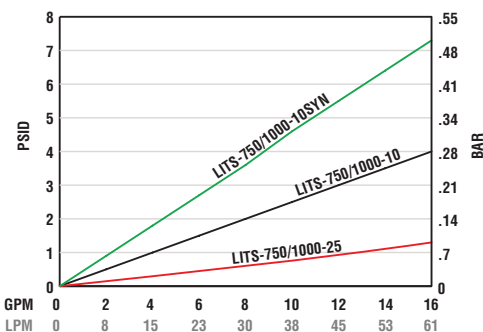
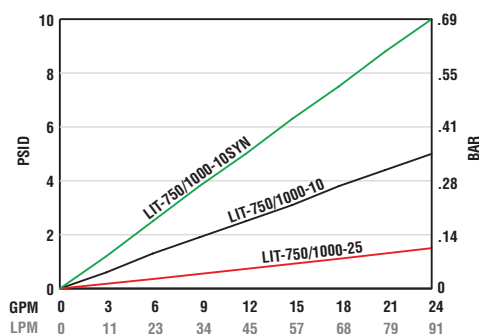
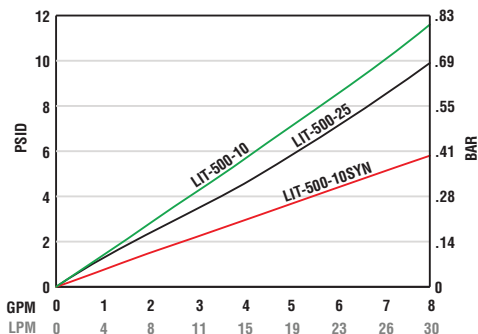
LIT-500



LIT-750, LIT-1000, LITXL-1000,



See Technical Bulletin TB.FIL9.708, TB.FIL11.708, TB.FIL20.708, for further information at (Technical Data – [www.lenzinc.com](http://www.lenzinc.com))



Temperature 100°F Viscosity 150 SUS  
Average pressure drop through clean assembly

## Assembly Ordering Code

LIT — 750 — 10 — P — T

Series	
LIT	NPT (ALL)
LITA	SAE (ALL)
LITS	SHORT (750 only)
LITXL	LONG (1000 only)

LITS, LITXL -  
Special order for SAE Ports

Model	Port Size
500	1/2"
750	3/4"
1000	1"

Media	Model
10	10 Mic. Cellulose
10SYN	10 Mic. Synthetic
25	25 Mic. Cellulose

Bypass	
P	(25 PSI)

Ind. Ports	
Omit	None
T	1/8 NPT Return

**For indicator gauge specifications and  
ordering information see pages 38a-39a**

*\*Indicators ordered and shipped separately*



## Replacement Elements

Filter Model	Element Number	Media	in	cm	B=2/20/75	Dirt Holding Capacity
LIT-500	LIT502-10P	10 Micron Cellulose	110	710	6μ/8μ/13μ	3
	LIT502-25P	25 Micron Cellulose	110	710	24μ/35μ/43μ	4
	LIT502-10SYN	10 Micron Synthetic	78	500	3μ/5.5μ/12μ	4
LITS-750, 1000	LITS-752-10P	10 Micron Cellulose	190	1225	6μ/8μ/13μ	6
	LITS-752-25P	25 Micron Cellulose	190	1225	24μ/35μ/43μ	8
	LITS-752-10SYN	10 Micron Synthetic	136	875	3μ/5.5μ/12μ	8
LIT-750, 1000	LIT-752-10P	10 Micron Cellulose	380	2450	6μ/8μ/13μ	11
	LIT-752-25P	25 Micron Cellulose	380	2450	24μ/35μ/43μ	15
	LIT-752-10SYN	10 Micron Synthetic	271	1750	3μ/5.5μ/12μ	16
LITXL-1000	LITXL-1002-10P	10 Micron Cellulose	620	4000	6μ/8μ/13μ	19
	LITXL-1002-25P	25 Micron Cellulose	620	4000	24μ/35μ/43μ	25
	LITXL-1002-10SYN	10 Micron Synthetic	450	2900	3μ/5.5μ/12μ	27

Beta Rating of 2 = 50% Efficiency  
Beta Rating of 20 = 95% Efficiency  
Beta Rating of 75 = 98.7% Efficiency  
Note: 45 PSI Pressure Drop Maximum  
Without Bypass Valve In Filter Head

Suggested tightening gauge to mount filter to reservoir is 8ft.lbs (11) NM.



## General Filter Specifications

### Bypasses

Differential opening set value + - 10%

### Medias

<b>Cellulose</b>	Resin impregnated paper
<b>Synthetic</b>	Inorganic micro fiber
<b>Wire Mesh</b>	140 micron, 100 mesh stainless Steel
<b>Water Removal</b>	10 micron resin impregnated paper

### Compatibility of Fluids with

#### Filter Heads & Bowls Per ISO 6743/4

**Mineral oils** (types HH, HL, HM, HR, HV)  
**Water based emulsions** (types HFAE, HFAS)  
**Synthetic fluids** (types HS, HFDR, HFDS, HFFU)  
**Water glycol** (types HFC)



LIT-1252-Bypass



LIT-1252-10P



CP-752-10

#### Compatibility of Fluids with Filter Elements Per ISO 2943

**Mineral oils** (types HH, HL, HM, HR, HV, HG) ISO 6743/4  
**Synthetic fluids** (types A & M series only)  
**Water based emulsions** consult Lenz for further information

## Compatibility of Fluids with Seals Per ISO 6743/4

### Nitrile (Buna N)

**Mineral Oils** (HH, HL, HM, HR, HV, HG)  
**Water emulsion** (HFAE, HFAS)  
**Water glycol** (HFC)

### Viton seals

**Synthetic fluids** (types HS, HFDR, HFDS, HFDU)

### Indicator Options

<b>Visual</b>	Suction & return visual gauges
<b>Electrical</b>	Suction & return electrical switches
<b>Differential</b>	Return indicators

### Mineral Oil Types

<b>HH</b>	Non inhibited refined mineral oils
<b>HL</b>	Refined mineral oils with anti-oxidation and anti-rust properties
<b>HM</b>	HL fluids with improved anti wear
<b>HR</b>	HL oils with VI improvers
<b>HV</b>	Lubricants with high viscosity
<b>HG</b>	HM oils with anti-stick slip properties

### Water Based Emulsion Types

<b>HFAE</b>	Oil water emulsions or aqueous fluids which are further with additional letters
<b>HFAS</b>	Solutions of chemicals containing minimum 80% of water
<b>HFC</b>	Aqueous solutions with viscosity-increasing additives and minimum 35% mass water

### Synthetic Fluid Types

<b>HFDU</b>	Fire resistant fluids of other compositions
<b>HFDS</b>	HFD based upon phosphoric acid ester
<b>HS</b>	Synthetic fluids with no specific fire resistant properties
<b>HFDR</b>	HFD based on halogen-containing compounds





## 2" Diameter Filter Indicating Gauges



### MC-12

Return Line Indicating Gauge  
for **15 PSI** Filter Applications  
2" Multi color

0-12 PSI Green  
12-15 PSI Yellow  
15-60 PSI Red (Service Filter)  
(To be used with "T" Indicator Port Location)



### MC-20

Return Line Indicating Gauge  
for **25 PSI** Filter Applications  
2" Multi color

0-20 PSI Green  
21-24 PSI Yellow  
25-60 PSI Red (Service Filter)  
(To be used with "T" Indicator Port Location)



**CHANGE FILTER**

### CP-2

Compound Indicating Gauge  
(Suction or Return Line)

10" to 30" Vacuum is a Red Danger Area.  
0-60 PSI  
A Red "Change Filter" Sticker for the  
Pressure side is included with each gauge  
for application after the pressure factor  
is determined.  
(To be used with "T" or "S" Indicator Port Location)



### GLY-MC-20

Glycerin Filled  
Return Line Indicating Gauge  
for **25 PSI** Filter Applications  
2" Multi color

0-20 PSI Green  
21-24 PSI Yellow  
25-60 PSI Red (Service Filter)  
(To be used with "T" Indicator Port Location)



### 135080

Suction Line Indicating Gauge for  
**5 PSI** vacuum filter application  
2" Multi color

0-9" HG Green  
9-11" HG Yellow  
11-30" HG Red (Service Filter)  
(To be used with "S" Indicator Port Location)



### VAC-3-20

Suction Line Indicating Gauge  
for **3 PSI** vacuum filter applications  
2" Multi color

0-3" HG Green  
4-6" HG Yellow  
6-30" HG Red (Service Filter)  
(To be used with "S" Indicator Port Location)

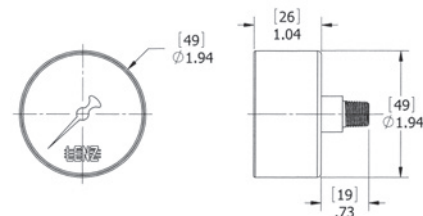


### Differential Indicator DP-75

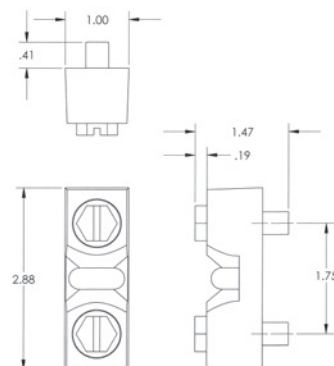
Simple differential sliding  
indicator which changes from  
green to red at 7 PSID.

0 - 7 PSID. Green Clean  
7 - 10 PSID. Red Service Filter  
CP Series (500, 750, 1010, 1280,  
1580)

*\*Indicators ordered and shipped separately*



### DIAL INDICATOR



### DP-75



# Electrical Filter Indicators

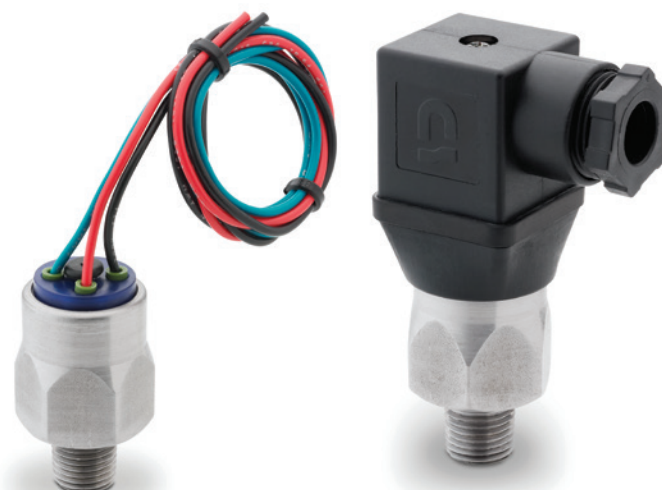
## Field Adjustable

### Specifications:

- 1/8 NPT connection
- 3 AMP 12/24 VDC, 125/250 VAC IP67
- +/- 2% repeatability of full set point range @ 70°F
- Operating temperature 40°F to +250°F (-40°C to 121°C)
- 1,000,000 cycles mechanical range
- Maximum pressure 500 (25 BAR) PSI
- Steel housing, zinc plated
- Buna N diaphragm
- SPDT snap action switch

### Options:

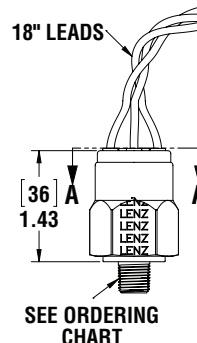
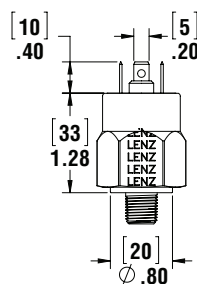
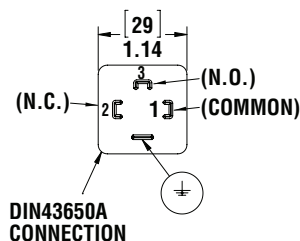
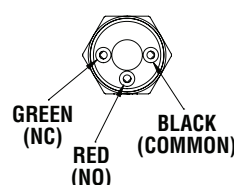
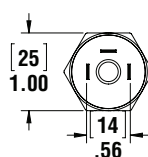
- EPDM seals -10°F – 250°F (-23°C – 121°C)
- Viton seals 0 – 250°F (-18°C – 121°C)
- Flying leads



LES-FL

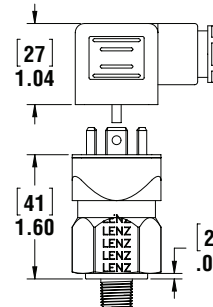
LES-HC

Model	Adjustment Range	Average Differential	Set Pressure
P1	3-20 PSI (.2-1.4 BAR)	2-5 PSI (.13-0.4 BAR)	15 PSI
P2	15-80 PSI (1.03-6 BAR)	4-7 PSI (.27-0.5 BAR)	22 PSI
V1	5-28 in Hg (160-948mb)	2-4 INHg (67-135mb)	5 Hg



SEE ORDERING CHART

LES-FL



LES-HC

## Switch Ordering Code

LES – P1 – 2N – B – HC –

Series	Adjustment Range	Thread	Seals	Electrical Connection	Options
LES	P1 3-20 PSI P2 15-80 PSI V1 5-30" HG Rising	2N 1/8" NPT 4N 1/4" NPT 4S 7/16"-20 6S 9/16"-18	B Buna V Viton E EPDM	FL Flying Leads HC Din Clamp	Omit SS Stainless Housing IL Ind Light

\*Indicators ordered and shipped separately

Switch can be used in AC or DC Service.  
For other options consult factory.  
Switch does not indicate differential pressure

See Technical Bulletin TB.FIL23.912, or further information at  
(Technical Data – [www.lenzinc.com](http://www.lenzinc.com))