



LITB In-Tank Filter / Breather

LITB-20, 40

Specifications

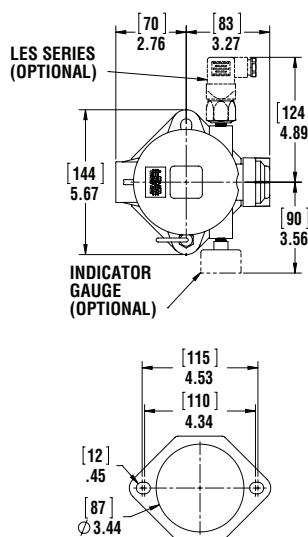
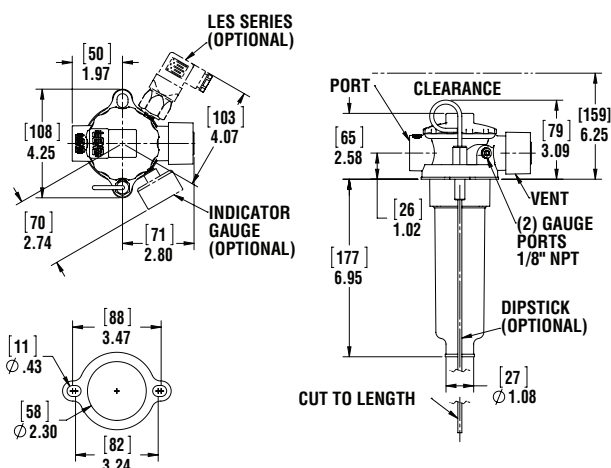
- Working pressure 150 PSI (7 Bar)
- Operating Temperatures -22°F to +212°F (-32C to +100C)
- Flows to 40 GPM (150 LPM) return
- 1/2", 3/4", 1" Ports
- 10 or 40 micron breathers
- Aluminum casting, nylon lid
- Buna Seals
- Compatible with mineral oils HH, HL, HM, HR, HV, HG, water based according to ISO 6743/4
- Three nylon bowl lengths
- 3-10 (lbs.), 1.4 - 4.5 (kgs.) shipping weight
- 25 PSID. bypass for return

Options

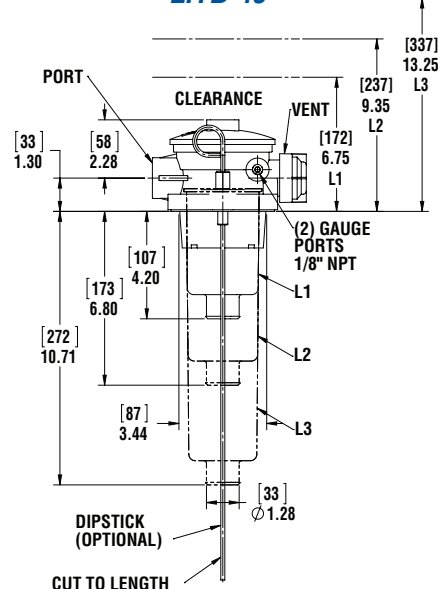
- NPT or SAE Ports
- 6, 10, 25 micron cellulose, synthetic elements
- Visual or electrical indicators
- Dipsticks available



LITB-20



LITB-40



Assembly Ordering Code

LITB-20 - 500 - 10 - 40 - D - T

Series	Port Size	Media		Breather	Options	Ind. Ports	Indicating Gauges
LITB-20	500	1/2"	10	10 Micron Cellulose	D Dipstick	None	(T) MC-20
LITBA-20	750	3/4"	10SYN	10 Micron Synthetic	Omit	T 1/8 NPT Return	(T) CP-2
			25	25 Micron Cellulose			(T) CP-2
			25SYN	25 Micron Synthetic			(T) LES-P2

NOTE: Indicators Page 34a

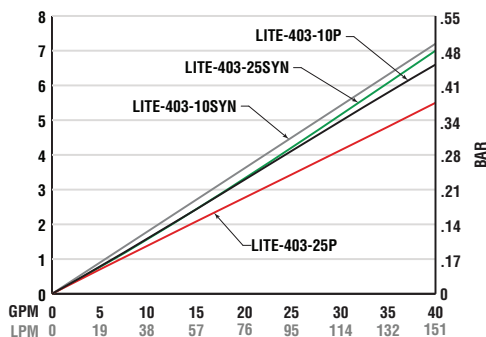
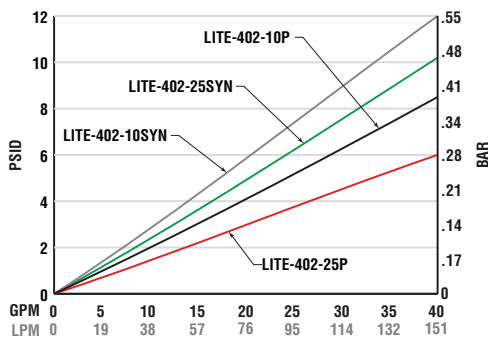
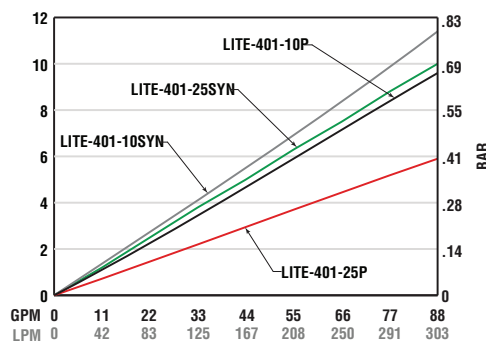
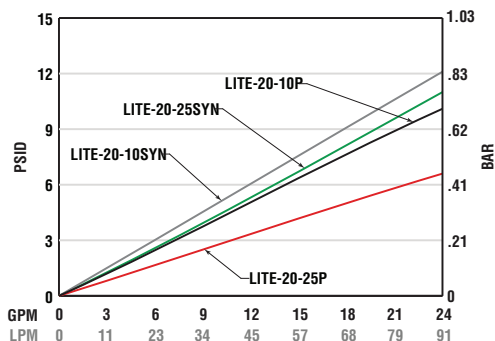
*Indicators ordered and shipped separately

Replacement Elements

Element	Area Media	Area in	cm	Beta	Ratio
LITE-20-10P	10 Micron Cellulose	135	870	B10	2
LITE-20-10SYN	10 Micron Synthetic	110	710	B10	75

Element	Area Media	Area In.	Cm	Beta	Ratio
LITE-20-25P	25 Micron Cellulose	110	710	B25	75
LITE-20-25SYN	25 Micron Synthetic	135	870	B25	2

See Technical Bulletin TB.FIL09.708, TB.FIL11.708, TB.FIL20.708, TB.FIL22.708, for further information at (Technical Data - www.lenzinc.com)



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

Assembly Ordering Code

LITB-40 — 1 — 750 — 10 — 40 — D — T

Series	Bowl Length	Port Size	Media	Breather	Options	Ind. Ports
LITB-40	1 4.3" Long	750 3/4"	10 10 Mic. Cellulose	10 10 Micron	D Dipstick	Omit None
LITBA-40	2 6.9" Long	1000 1"	10SYN 10 Mic. Synthetic	40 40 Micron	Omit	T 1/8 Npt Return
	3 10.8" Long		25 25 Mic. Cellulose			
			25SYN 25 Mic. Synthetic			

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

**Indicators ordered and shipped separately*



Replacement Elements

	ELEMENT NUMBER	MEDIA	in	CM	B= 2/20/75	DIRT HOLDING
4.3" Bowl Length	LITE-20-10	10 Micron Cellulose	190	1226	9μ/22μ/24μ	6
	LITE-20-25	25 Micron Cellulose	190	1226	29μ/46μ/54μ	8
	LITE-20-10SYN	10 Micron Synthetic	167	1077	4μ/10μ/12μ	10
	LITE-20-25SYN	25 Micron Synthetic	167	1077	8μ/25μ/32μ	12
6.9" Bowl Length	LITE-401-10	10 Micron Cellulose	242	1561	9μ/22μ/24μ	7
	LITE-401-25	25 Micron Cellulose	242	1561	29μ/46μ/54μ	10
	LITE-401-10SYN	10 Micron Synthetic	164	1058	4μ/10μ/12μ	10
	LITE-401-25SYN	25 Micron Synthetic	164	1058	8μ/25μ/32μ	12
10.8" Bowl Length	LITE-402-10	10 Micron Cellulose	367	2368	9μ/22μ/24μ	11
	LITE-402-25	25 Micron Cellulose	367	2368	29μ/46μ/54μ	15
	LITE-402-10SYN	10 Micron Synthetic	249	1607	4μ/10μ/12μ	15
	LITE-402-25SYN	25 Micron Synthetic	249	1607	8μ/25μ/32μ	17
	LITE-403-10	10 Micron Cellulose	606	3910	9μ/22μ/24μ	18
	LITE-403-25	25 Micron Cellulose	606	3910	29μ/46μ/54μ	24
	LITE-403-10SYN	10 Micron Synthetic	424	2736	4μ/10μ/12μ	25
	LITE-403-25SYN	25 Micron Synthetic	424	2736	8μ/25μ/32μ	30

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



General Filter Specifications

Bypasses

Differential opening set value + - 10%

Medias

Cellulose	Resin impregnated paper
Synthetic	Inorganic micro fiber
Wire Mesh	140 micron, 100 mesh stainless Steel
Water Removal	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

Visual	Suction & return visual gauges
Electrical	Suction & return electrical switches
Differential	Return indicators

Mineral Oil Types

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

Water Based Emulsion Types

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

Synthetic Fluid Types

HFDU	Fire resistant fluids of other compositions
HFDS	HFD based upon phosphoric acid ester
HS	Synthetic fluids with no specific fire resistant properties
HFDR	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

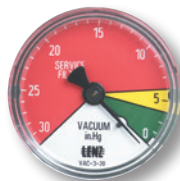
0-20 PSI Green
21-24 PSI Yellow
25-60 PSI Red (Service Filter)
(To be used with "T" Indicator Port Location)



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)

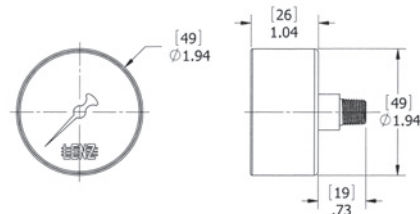


Differential Indicator DP-75

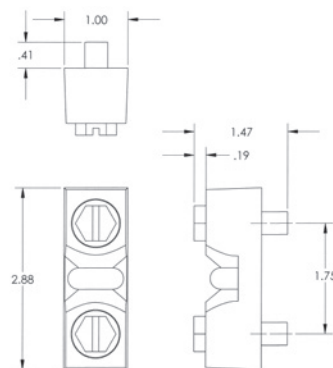
Simple differential sliding
indicator which changes from
green to red at 7 PSID.

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

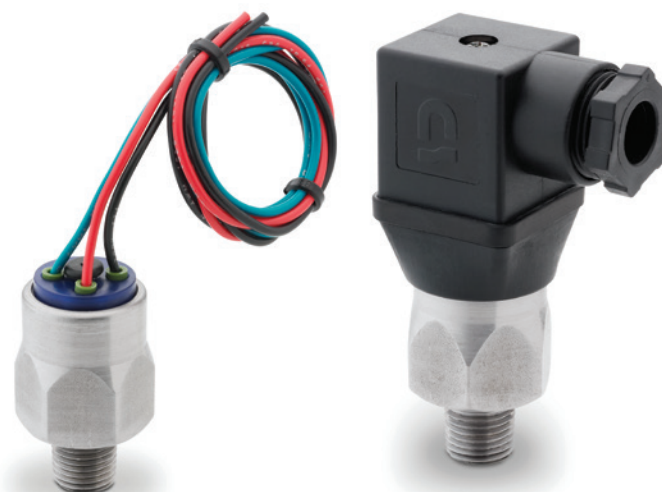
Field Adjustable

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:

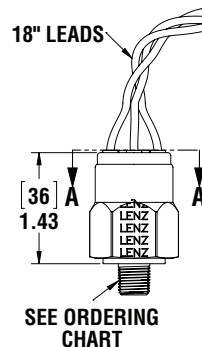
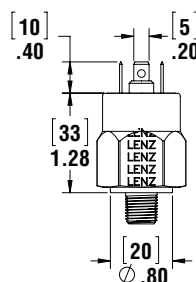
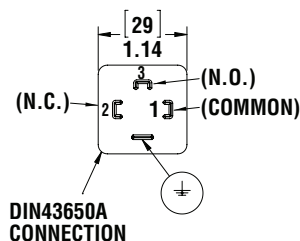
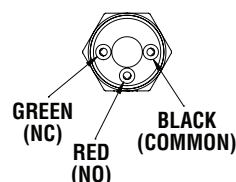
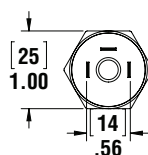
- EPDM seals -10°F – 250°F (-23°C – 121°C)
- Viton seals 0 – 250°F (-18°C – 121°C)
- Flying leads



LES-FL

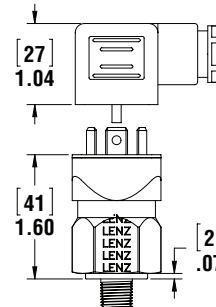
LES-HC

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)