



Disposable Filter Cartridge Type

Suction or Return Line Filter Assembly Model "TMR-TMS" Series

Specifications

- Tank or line mounted.
- 5 sizes-flows to 185 GPM (700 LPM).
- By-pass standard. Return: 25 PSI Suction: 3 PSI
- Aluminium die cast construction.
- Working pressure to 300 PSI (21 bar)
- Buna seals.
- Operating temperatures -22°F to +212°F (-32°C to +100°C)
- Compatible with mineral oils HH, HL, HM, HR, HV, HG, water according to ISO 6743/4
- Visual or electrical indicators
- Magnet on lid



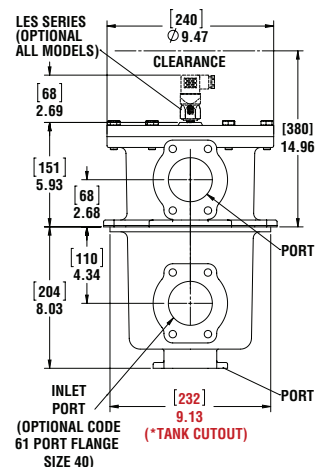
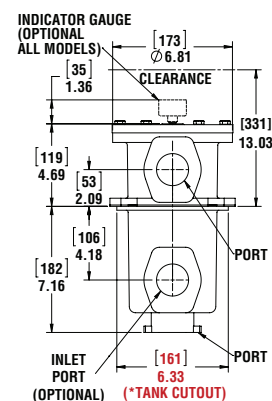
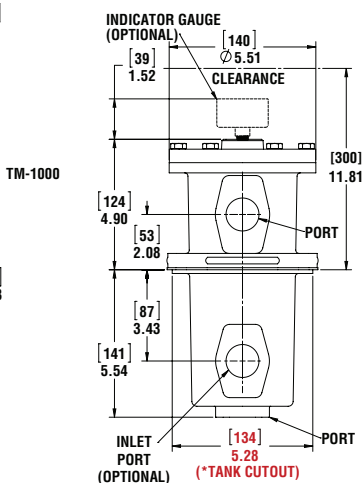
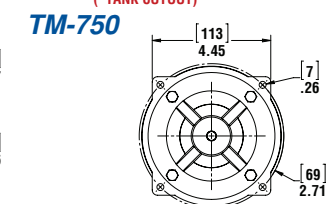
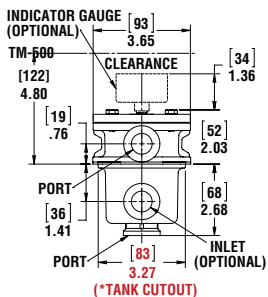
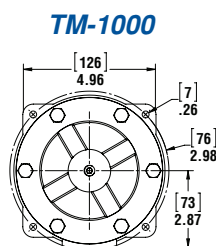
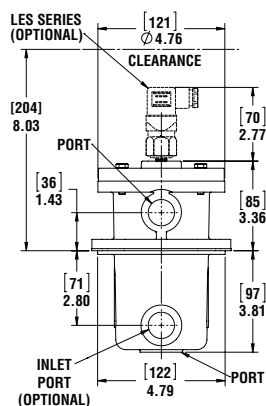
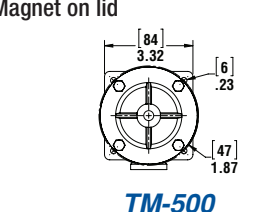
TM*-2500



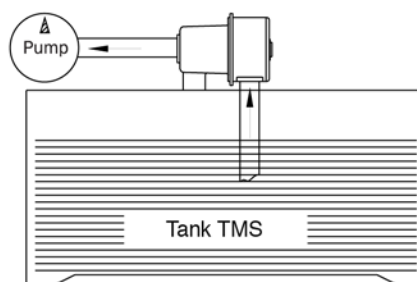
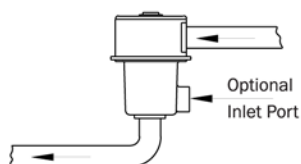
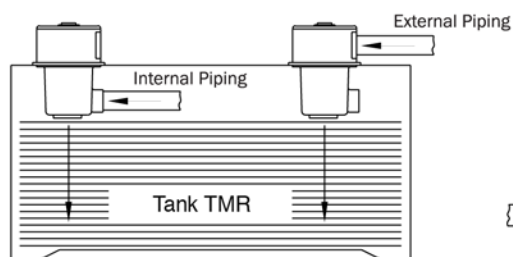
TMR*-1000



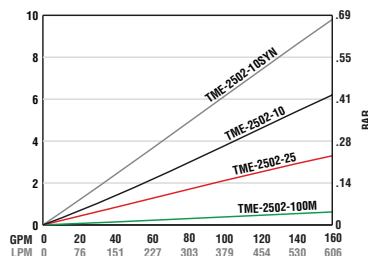
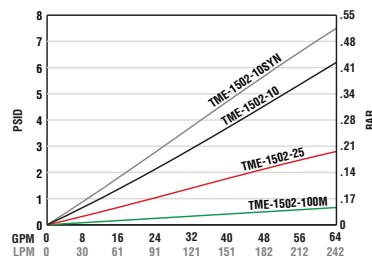
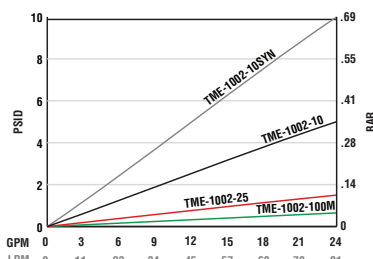
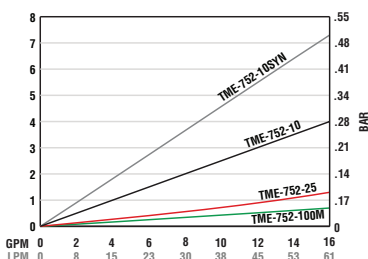
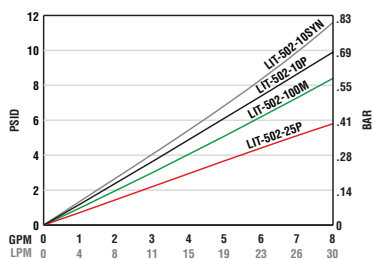
TME



*Bolt circles are radius



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



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

Assembly Ordering Code

TMR — 2 — 500 — B — 10 — T

STYLE	
TMR	Return (25 PSI By-Pass)
TMS	Suction (3 PSI By-Pass)

INLET Port	
NP	Not Ported
2	Ported

Size	Port (NPT)
500	1/2"
750	3/4"
1000	1"
1500	1 1/2"
*2500	2 1/2" SAE Split Flange

*Code 61Port Flange

Element	
10	10µ Nominal 10 Micron Cellulose
25	25µ Nominal 25 Micron Cellulose
100	149 Micron SS Mesh
10 SYN	10 Micron Synthetic

Ind. Ports	
Omit	None
T	1/8 NPT Return
S	1/8 NPT Suction

All housings have machined optional inlet port.
Lenz will supply plug if NP option is ordered.
Consult LENZ for S.A.E ports

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
TM*-500	LIT-502-10P	10 Micron Cellulose	110	710	6µ/8µ/13µ	3
	LIT-502-25P	25 Micron Cellulose	110	710	24µ/35µ/43µ	4
	LIT-502-10SYN	10 Micron Synthetic	77	500	3µ/5.5µ/12µ	4
	LIT-502-100M	140 Micron Wire Mesh	50	325	140µ	N/A
TM*-750	TME-752-10	10 Micron Cellulose	271	1748	6µ/8µ/13µ	8
	TME-752-25	25 Micron Cellulose	271	1748	24µ/35µ/43µ	11
	TME-752-10SYN	10 Micron Synthetic	193	1250	3µ/5.5µ/12µ	12
	TME-752-100M	140 Micron Wire Mesh	93	600	140µ	N/A
TM*-1000	TME-1002-10	10 Micron Cellulose	410	2645	6µ/8µ/13µ	12
	TME-1002-25	25 Micron Cellulose	410	2645	24µ/35µ/43µ	16
	TME-1002-10SYN	10 Micron Synthetic	290	1880	3µ/5.5µ/12µ	17
	TME-1002-100M	140 Micron Wire Mesh	140	903	140µ	N/A
TM*-1500	TME-1502-10	10 Micron Cellulose	1225	7903	6µ/8µ/13µ	37
	TME-1502-25	25 Micron Cellulose	1225	7903	24µ/35µ/43µ	49
	TME-1502-10SYN	10 Micron Synthetic	847	5500	3µ/5.5µ/12µ	51
	TME-1502-100M	140 Micron Wire Mesh	340	2200	140µ	N/A
TM*-2500	TME-2502-10	10 Micron Cellulose	2250	14516	6µ/8µ/13µ	68
	TME-2502-25	25 Micron Cellulose	2250	14516	24µ/35µ/43µ	90
	TME-2502-10SYN	10 Micron Synthetic	1555	101000	3µ/5.5µ/12µ	93
	TME-2502-100M	140 Micron Wire Mesh	542	3496	140µ	N/A

For 25 Micron Synthetic, 74 Micron Mesh, replacement elements consult factory. Reuse bypass valve when changing elements.

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

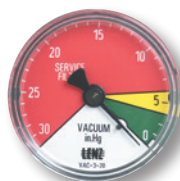
0-20 PSI Green
21-24 PSI Yellow
25-60 PSI Red (Service Filter)
(To be used with "T" Indicator Port Location)



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)

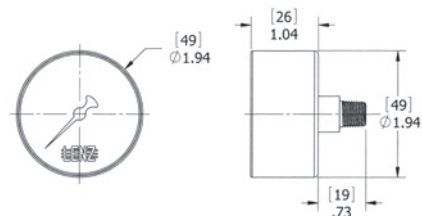


Differential Indicator DP-75

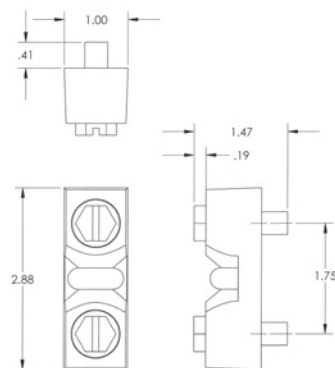
Simple differential sliding
indicator which changes from
green to red at 7 PSID.

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

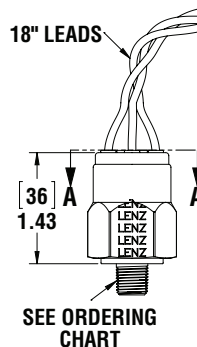
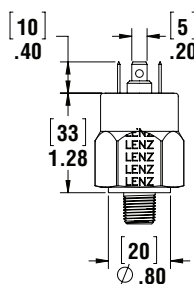
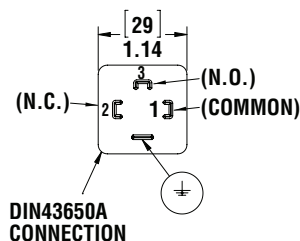
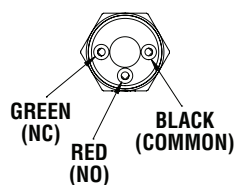
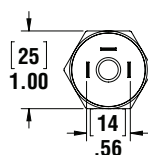


LES-FL



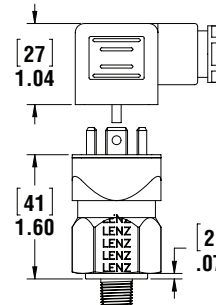
LES-HC

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)