



In-Tank Filters In-to-Out Flow Disposable Filter Cartridge Type

Return Line Application

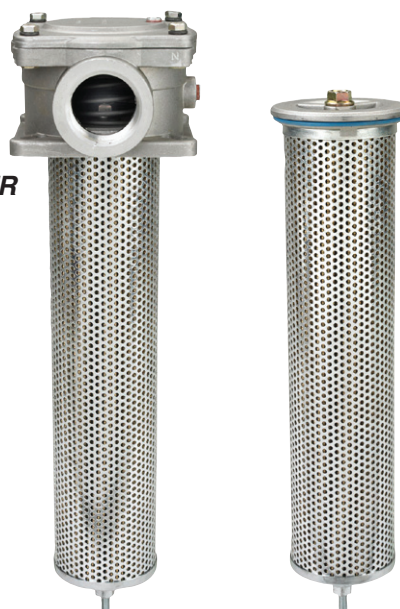
Model "TFR" 750, 1000, 1200, 1250, 1500, 2000

- Working pressure 150 PSI (10 bar)
- Operating temperatures -22F to +212 F (-32C to +100 C)
- Flows to 120 GPM, (450 LPM)
- Bypass 25 PSI
- Compatible with mineral oils HH, HL, HM, HR, HV, HG according to ISO 6743/4
- aluminum casting

Options

- NPT or SAE ports
- 10, 25 micron cellulose, synthetic elements
- 45 PSID bypass
- Visual or electrical indicators
- Magnetic Core
- Diffuser Tube

TFR



TFR 1 Element Length

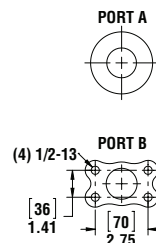
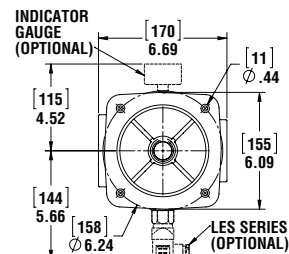
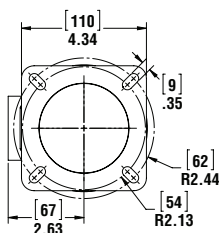
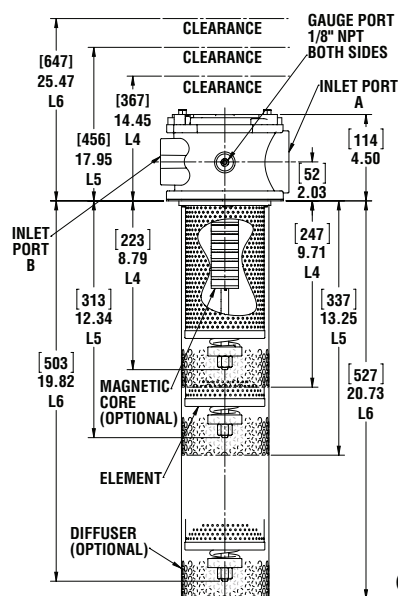
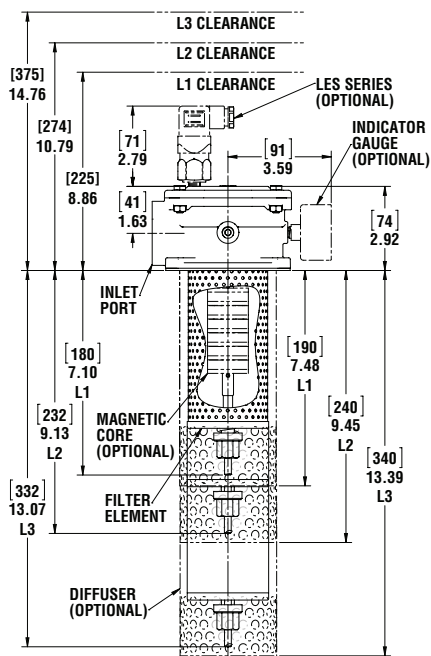
MODEL NO		C	D
TFR1-L1	IN	7.1	7.9
	MM	180	200
TFR1-L2	IN	9.1	9.8
	MM	230	250
TFR1-L3	IN	13.0	13.8
	MM	330	350

TFR 2 Element Length

MODEL NO		C	D
TFR2-L4	IN	9.3	10.0
	MM	235	255
TFR2-L5	IN	11.8	12.6
	MM	300	320
TFR2-L6	IN	19.9	20.7
	MM	505	525

TFR Port Housing

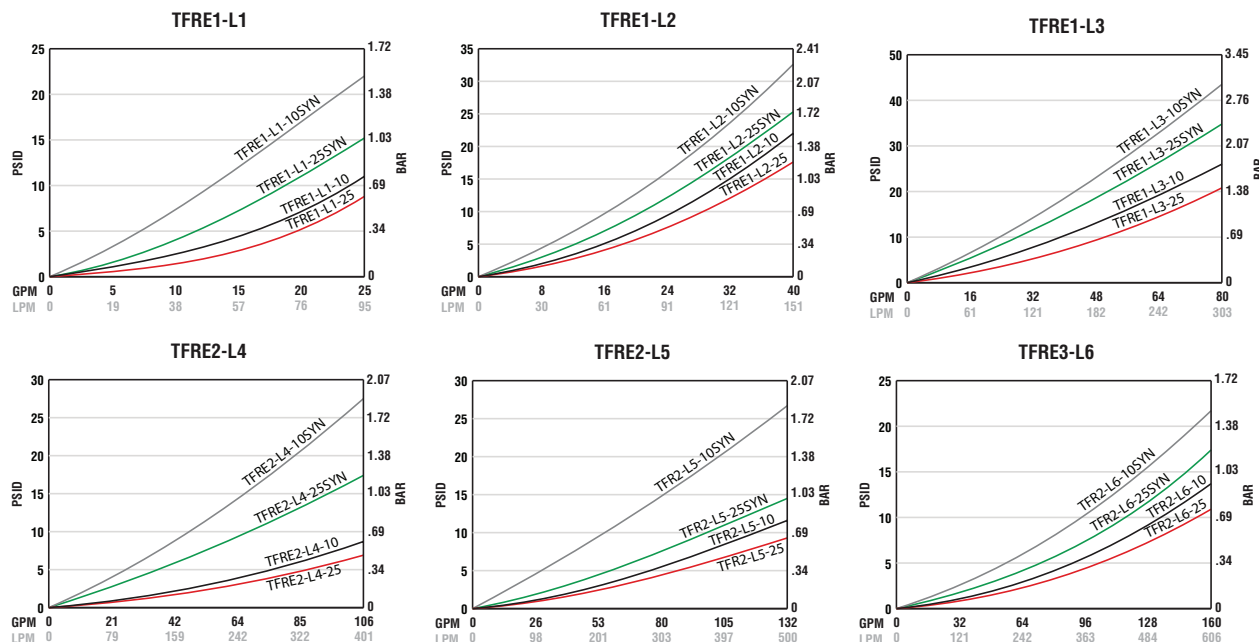
	INLET A	INLET B
TFR-2-1250	1 1/4" NPT	1 1/2" FLANGE-1 1/4" NPT
TFRA-2-1250	1 5/8"-12 SAE	1 1/2" FLANGE-1 5/8"-12 SAE
	INLET A	INLET B
TFR-2-1500	1 1/2" NPT	1 1/2" FLANGE-1 1/4" NPT
TFRA-2-1500	1 7/8"-12 SAE	1 1/2" FLANGE-1 5/8"-12 SAE
	INLET A	INLET B
TFR-2-2000	2" NPT	1 1/2" FLANGE-1 1/4" NPT
TFRA-2-2000	2 1/2"-12 SAE	1 1/2" FLANGE-1 5/8"-12 SAE



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

For indicator gauge specifications and ordering information see pages 34a-35a





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

Assembly Ordering Code

TFR - 2 - 1000 - 10 - L6 - R - LMC-LD - T

SERIES	MODEL	PORT	SIZE	MICRON	BOWL	BYPASS	OMIT OPTIONS	INDICATORS
TFR	1	750	3/4	10	LENGTH	P	LMC	T
TFRA	2	1000	1	25	PORT	R	LD	PLUGGED
		1200	1 1/4	10SYN	L1	W		
		1250	1 1/4	25SYN	L2			
		1500	1 1/2		L3			
		2000	2		L4			
					L5			
					L6			

Replacement Elements

MODEL NUMBER	MEDIA	IN ²	CM ²	B= 2/20/75	DIRT HOLDING CAPACITY
TFR1E-L1-10	10 MICRON CELLULOSE	279	1800	6μ/8μ/13μ	8
TFR1E-L1-25	25 MICRON CELLULOSE	279	1800	24μ/35μ/43μ	11
TFR1E-L1-10SYN	10 MICRON SYNTHETIC	190	1225	3μ/5.5μ/12μ	11
TFR1E-L1-25SYN	25 MICRON SYNTHETIC	190	1225	7μ/16μ/23μ	13
TFR1E-L2-10	10 MICRON CELLULOSE	403	2600	6μ/8μ/13μ	12
TFR1E-L2-25	25 MICRON CELLULOSE	403	2600	24μ/35μ/43μ	16
TFR1E-L2-10SYN	10 MICRON SYNTHETIC	264	1700	3μ/5.5μ/12μ	16
TFR1E-L2-25SYN	25 MICRON SYNTHETIC	264	1700	7μ/16μ/23μ	19
TFR1E-L3-10	10 MICRON CELLULOSE	589	3800	6μ/8μ/13μ	18
TFR1E-L3-25	25 MICRON CELLULOSE	589	3800	24μ/35μ/43μ	24
TFR1E-L3-10SYN	10 MICRON SYNTHETIC	407	2625	3μ/5.5μ/12μ	24
TFR1E-L3-25SYN	25 MICRON SYNTHETIC	407	2625	7μ/16μ/23μ	28
TFR2E-L4-10	10 MICRON CELLULOSE	496	3200	6μ/8μ/13μ	15
TFR2E-L4-25	25 MICRON CELLULOSE	496	3200	24μ/35μ/43μ	20
TFR2E-L4-10SYN	10 MICRON SYNTHETIC	419	2700	3μ/5.5μ/12μ	25
TFR2E-L4-25SYN	25 MICRON SYNTHETIC	419	2700	7μ/16μ/23μ	29
TFR2E-L5-10	10 MICRON CELLULOSE	713	4600	6μ/8μ/13μ	21
TFR2E-L5-25	25 MICRON CELLULOSE	713	4600	24μ/35μ/43μ	28
TFR2E-L5-10SYN	10 MICRON SYNTHETIC	574	3700	3μ/5.5μ/12μ	34
TFR2E-L5-25SYN	25 MICRON SYNTHETIC	574	3700	7μ/16μ/23μ	40
TFR2E-L6-10	10 MICRON CELLULOSE	1054	6800	6μ/8μ/13μ	32
TFR2E-L6-25	25 MICRON CELLULOSE	1054	6800	24μ/35μ/43μ	42
TFR2E-L6-10SYN	10 MICRON SYNTHETIC	837	5400	3μ/5.5μ/12μ	50
TFR2E-L6-25SYN	25 MICRON SYNTHETIC	837	5400	7μ/16μ/23μ	59

For 25 Micron Synthetic, 74 Micron Mesh, replacement elements consult factory

Beta Rating of 2 = 50% Efficiency

Beta Rating of 20 = 95% Efficiency

Beta Rating of 75 = 98.7% Efficiency

Note: 45 P.S.I. Pressure Drop Maximum



2" Diameter Filter Indicating Gauges



MC-12

Return Line Indicating Gauge
for 15 P.S.I. Filter Applications
2" Multi color

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



MC-20

Return Line Indicating Gauge
for 25 P.S.I. Filter Applications
2" Multi color

0-20 P.S.I. Green
21-24 P.S.I. Yellow
25-60 P.S.I. 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 P.S.I. Filter Applications
2" Multi color

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



135080

Suction Line Indicating Gauge for
5 P.S.I. vacuum filter application
2" Multi color

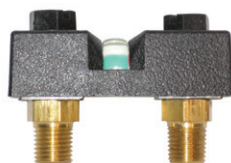
0-9" HG Green
9-11" HG Yellow
11-30" HG Red (Service Filter)
(To be used with "S" Indicator Port Location)



VAC-3-20

Suction Line Indicating Gauge
for 3 P.S.I. 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 P.S.I.D.

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



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

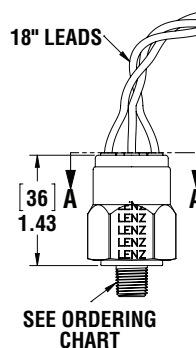
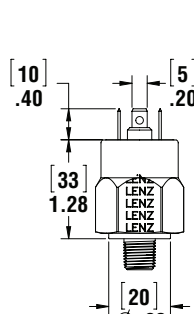
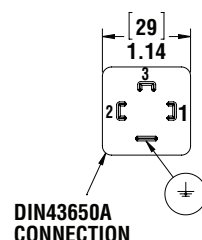
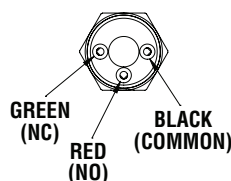
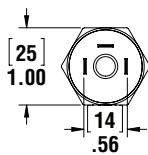


LES-FL

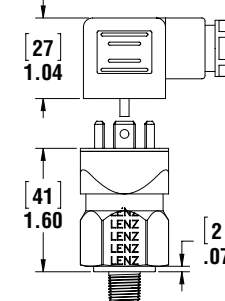


LES-HC

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



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

Switch can be used in AC or DC Service.
For other options consult factory.

See Technical Bulletin TB.FIL23.912, or further information at
(Technical Data – www.lenzinc.com)