



Sump Strainers

49 Series Steel Nuts

Plated Steel Hex:

In a full range of NPT sizes, 3/4" thru 6".

Steel Support Tube:

Provides rigidity, permits easy cleaning and better flow.

Pleated, Reusable Stainless Wire Cloth:

Keeps its shape and allows better flow. For use with hydraulic fluids, oils, coolants, cutting oils and lubricants. Excellent for mobile equipment. Easily cleaned. Choice of 30, 60, 100 or 200 mesh. See Ordering Code.

Plated Steel Cap End:

Epoxy-bonded for one-piece construction.

Trouble-Free Positive Protection:

All metal, nickel plated construction. No organic elements to deteriorate. These smooth, one-piece, epoxy-bonded units are carefully and compactly constructed with quality materials throughout. They assure trouble-free, positive protection for the entire system. Excellent for mobile equipment.

Easily Installed and Cleaned:

Easily removed and cleaned with gasoline and similar solvents.

Operating Temperature

15°F (-9°C) to 212°F (100°C)

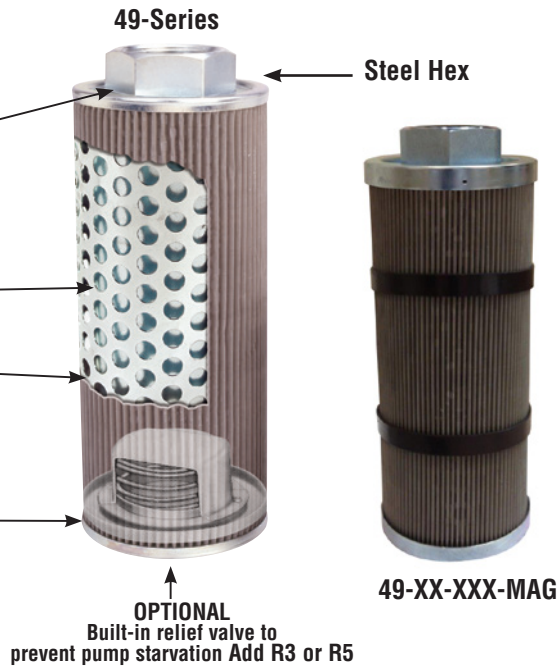
OPTIONAL:

Bypass Valves

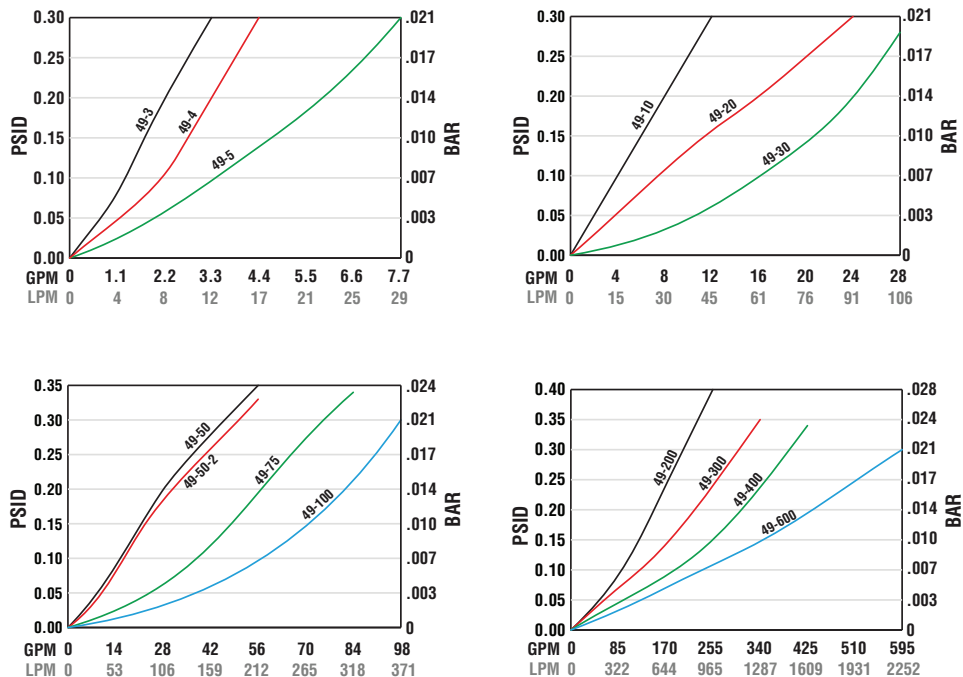
3 PSI/ 6" HG / 5 PSI/ 10" HG ± 10%

Magnetic Bands

Optional magnets are available



49 Series Performance Graphs



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

See Technical Bulletin TB.FIL17.708, TB.FIL19.708, or further information at (Technical Data – www.lenzinc.com)

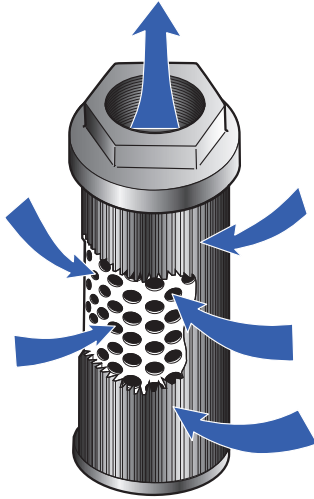


Strainer Ordering Code

49 — 20 — R3 — 100 — MAG

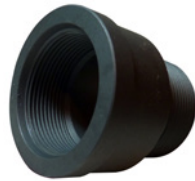
Series 49	Flow	Size	Bypass	Mesh	OPTIONS
	3	3/8" NPT	Omit NO Bypass	100 100 Mesh (STANDARD)	Omit
	4	1/2" NPT	R3 3 PSI Bypass	30 30 Mesh	MAG MAGNETS
	5	3/4" NPT	R5 5 PSI Bypass	60 60 Mesh	
	10	1" NPT		200 200 Mesh	
	20	1 1/4" NPT			
	30	1 1/2" NPT			
	50	1 1/2" NPT			
	50-2	2" NPT			
	75	2 1/2" NPT			
	100	3" NPT			
	*200	4" NPT			
	*300	4" NPT			
	*400	4" NPT			
	*600	4" NPT			

Consult Factory for
BSPP Threads

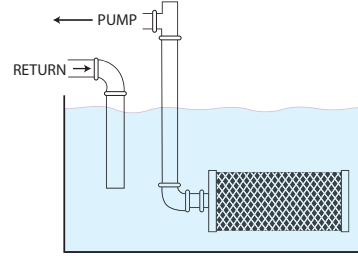
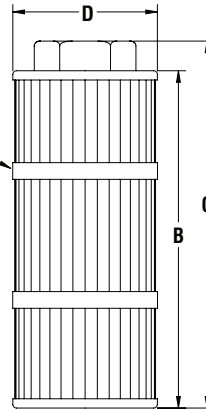
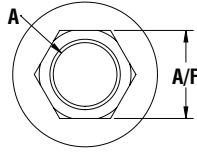


AN-WM Weld Adapter

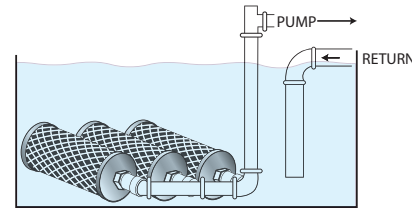
See page 57a
up to 2" NPT



MAGNET
(OPTIONAL)



Typical Single Unit Installation



Typical Multiple Unit Installation

Dimensional Details

Model Steel	Flow		A NPT Port	B BODY	C O.A.L.	D Diameter	A/F Hex	Area In ² (CM ²)	Optional Magnet	
									Quantity	Part#
49-3	3 GPM	in	3/8"	1.9	2.5	1.7	1.0	20	1	1.9-100
	11 LPM	mm		48.5	63.5	42	25	(132)		
49-4	5 GPM	in	1/2"	2.6	3.1	2.6	1.2	42	1	4-10
	20 LPM	mm		65	79.5	66	30	(274)		
49-5	8 GPM	in	3/4"	3.1	3.6	2.6	1.5	54	2	4-10
	32 LPM	mm		77.5	92	66	38	(347)		
49-10	30 GPM	in	1"	4.8	5.4	2.6	1.6	95	2	4-10
	40 LPM	mm		122.5	137	66	41	(610)		
49-20	20 GPM	in	1 1/4"	6.4	6.9	3.3	2.0	178	2	3.4-100
	80 LPM	mm		161.5	175	85	50	(1149)		
49-30	30 GPM	in	1 1/2"	7.5	8.0	3.3	2.2	214	2	3.4-100
	120 LPM	mm		190	204	85	55	(1380)		
49-50	50 GPM	in	1 1/2"	9.3	9.9	3.9	2.2	310	2	30-50
	200 LPM	mm		235	251.5	100	55	(2001)		
49-50-2	50 GPM	in	2"	9.3	9.9	3.9	2.6	310	2	30-50
	200 LPM	mm		235	251.5	100	65	(2001)		
49-75	75 GPM	in	2 1/2"	9.5	10.1	5.1	3.4	443	3	5-100
	285 LPM	mm		241	256.5	129.5	85.5	(2857)		
49-100	100 GPM	in	3"	11.2	11.8	5.1	3.9	527	3	5-100
	380 LPM	mm		284	299	129.5	100	(3403)		
49-200	200 GPM	in	4"	8.7	11.6	8.1	5.0	787	4	8-100
	800 LPM	mm		220	295	205	126	(5080)		
49-300	300 GPM	in	4"	12.0	15.0	8.1	5.0	1102	4	8-100
	1200 LPM	mm		305	380	205	126	(7112)		
49-400	400 GPM	in	4"	15.2	18.1	8.1	5.0	1417	4	8-100
	1600 LPM	mm		385	460	205	126	(9144)		
49-600	600 GPM	in	4"	21.3	24.2	8.1	5.0	2047	4	8-100
	2400 LPM	mm		540	615	205	126	(13208)		

200, 300, 400, 600 are couplings not hex nuts

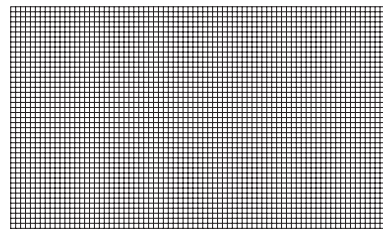
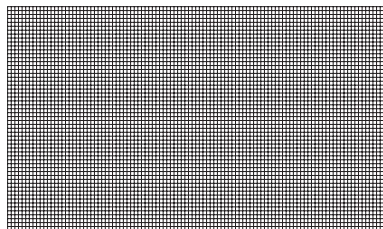


FILTERS – ACTUAL SIZE MESH

LENZ Cleanable Wire Cloth Filters are equipped with Stainless Steel Wire Cloth Elements. The filtering insert elements are available from a coarse 30 mesh up to a fine 200 mesh. To better illustrate mesh sizes, we have shown below the actual size mesh of the 100, 80, 60, 50, 40, and 30 mesh stainless steel wire screen. **The most common are 200, 100, 60, and 30 Stainless Steel Wire Mesh Screen. (100 Mesh LENZ Standard)**

200 Mesh

Wire diameter .0021
Width of opening .0029
Microns = 74
33.6% of open area



150 Mesh

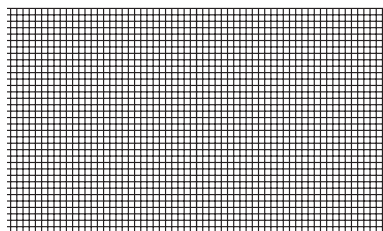
Wire diameter .0026
Width of opening .0041
Microns = 105

50 Mesh

Wire diameter .0080
Width of opening .0120 = 308 Microns

40 Mesh

Wire diameter .0100
Width of opening .0150 = 385 Microns
36% of open area

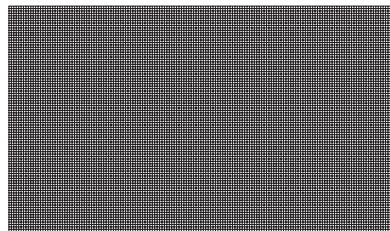


100 Mesh

Wire diameter .0045
Width of opening .0055 = 141 Microns
30.3% of open area

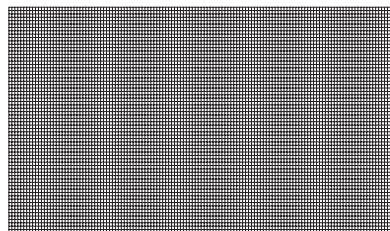
30 Mesh

Wire diameter .0120
Width of opening .0213 = 546 Microns
44.8% of open area



80 Mesh

Wire diameter .0055
Width of opening .0070 = 180 Microns



60 Mesh

Wire diameter .0065
Width of opening .0102 = 262 Microns
37.5% of open area

$$\beta_x = \frac{\text{Number of Particles greater than X microns upstream}}{\text{Number of particles greater than X Microns downstream}}$$

$$\beta_5 = 10/1 = 10$$

