



## 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)

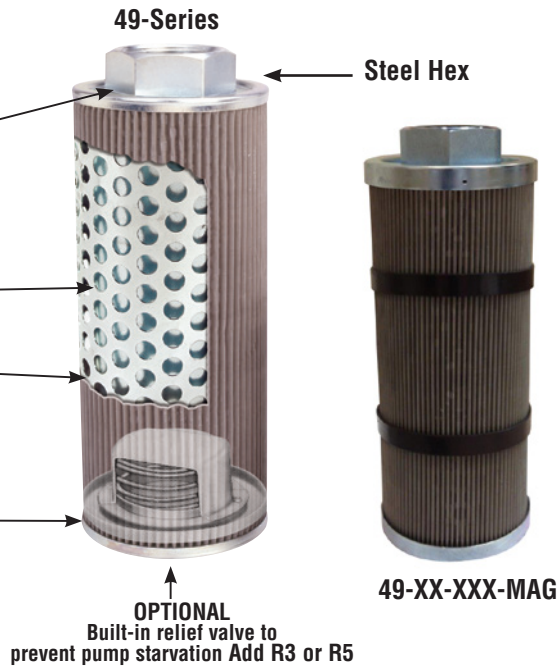
#### OPTIONAL:

##### Bypass Valves

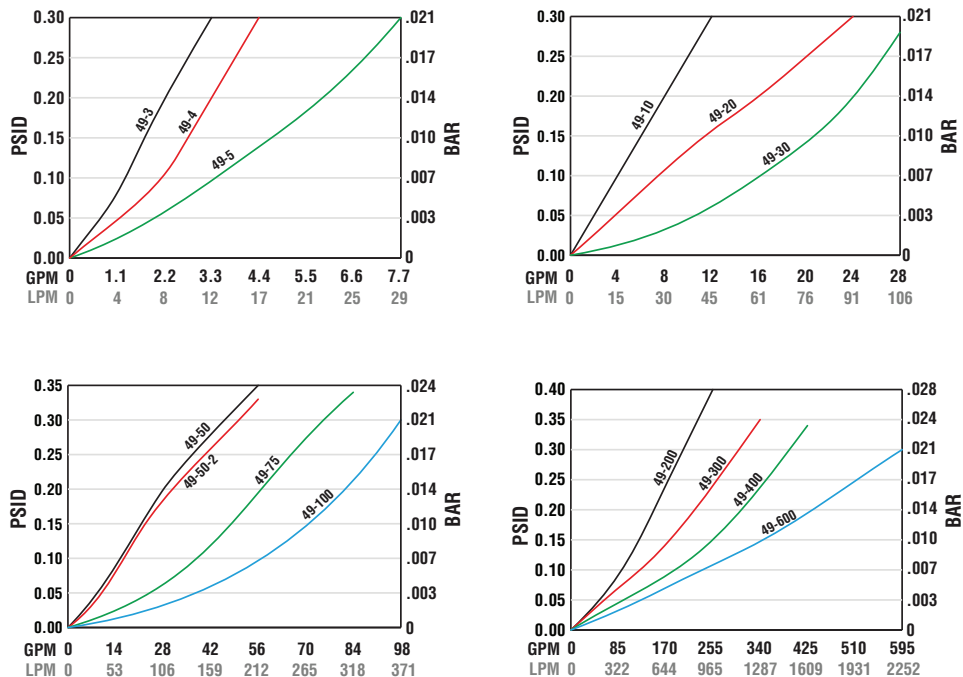
3 PSI/ 6" HG / 5 PSI/ 10" HG ± 10%

##### 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](http://www.lenzinc.com))

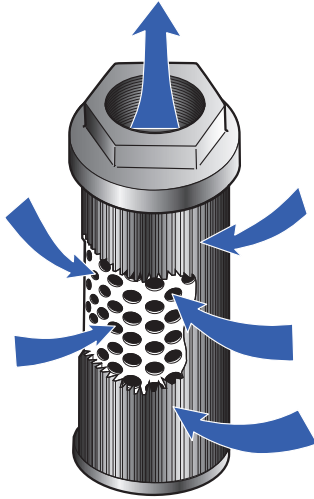


## Strainer Ordering Code

**49 — 20 — R3 — 100 — MAG**

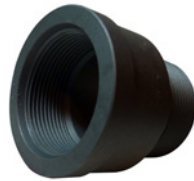
<b>Series</b> 49	<b>Flow</b>	<b>Size</b>	<b>Bypass</b>	<b>Mesh</b>	<b>OPTIONS</b>
	3	3/8" NPT	Omit NO Bypass	100 100 Mesh <b>(STANDARD)</b>	Omit
	4	1/2" NPT	R3 3 PSI Bypass	30 30 Mesh	MAG MAGNETS
	5	3/4" NPT	R5 5 PSI Bypass	60 60 Mesh	
	10	1" NPT		200 200 Mesh	
	20	1 1/4" NPT			
	30	1 1/2" NPT			
	50	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

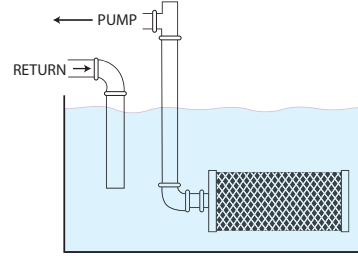
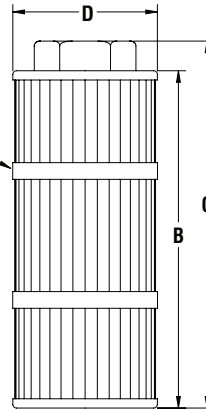
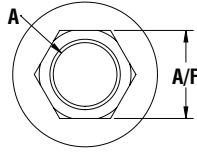


**AN-WM Weld Adapter**

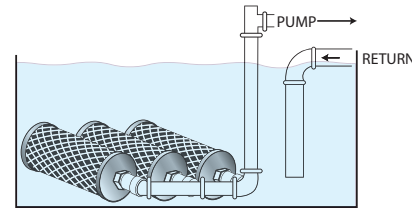
See page 57a  
up to 2" NPT



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 <sup>2</sup> (CM <sup>2</sup> )	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

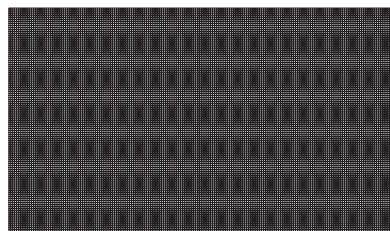
LENZ Cleanable Wire Cloth Filters are equipped with Stainless Steel Wire Cloth Elements. The filtering insert elements are available from a coarse 30 mesh up to a fine 200 mesh. To better illustrate mesh sizes, we have shown below the actual size mesh of the 100, 80, 60, 50, 40, and 30 mesh stainless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

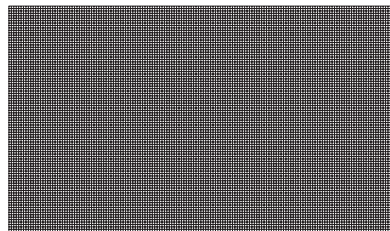
**150 Mesh**

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



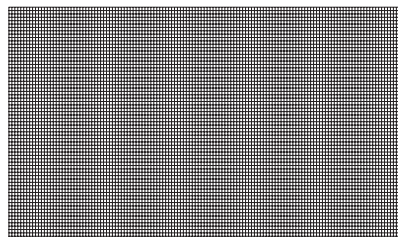
**100 Mesh**

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



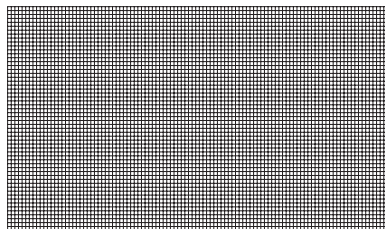
**80 Mesh**

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



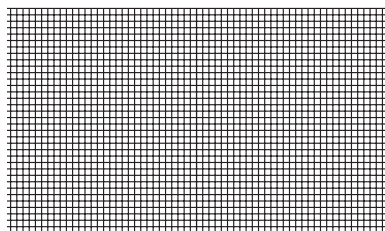
**60 Mesh**

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



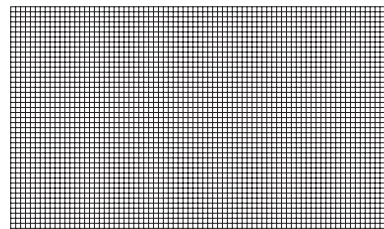
**50 Mesh**

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



**30 Mesh**

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



**40 Mesh**

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

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

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

