#### PRODUCT <u>GUIDE</u>

# GardTec

Wire Form Fan Guards

Plastic Fan Guards

Plastic Fan Filter Assemblies

Aluminum Fan Filter Assemblies

Custom Fan Accessories

Fan Power Cords

World class manufacturing of the largest and most technologically advanced fan accessories.



# Welcome

Established in 1987, with the single goal of becoming the #1 supplier in the world of fan accessory products. GardTec has met this goal through acquisition and the development of world class manufacturing facilities, strategically located in markets to meet our customers worldwide demand for the highest quality products.

The most modern manufacturing and engineering facilities, push the limits of design and materials to formulate the most innovative fan accessory products in the market. Complete engineering and design services, offer our customers the very best products to meet specific application requirements.

Wire Form Fan Guards pages **1-8** 

> Plastic Fan Guards page 9

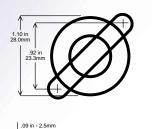
Aluminum Fan Filters page 10

Plastic Fan Filter Assemblies pages 10-11





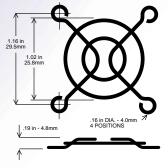




Ring Diameter: 1.4 mm Rib Diameter: 1.4 mm

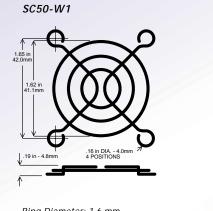
#### <u>35mm (1.375")</u>

#### SC35-W1



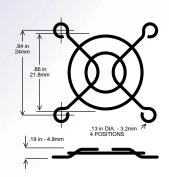
Ring Diameter: 1.6 mm Rib Diameter: 1.6 mm

#### 50mm (2.0")



Ring Diameter: 1.6 mm Rib Diameter: 1.6 mm <u>30mm (1.25")</u>

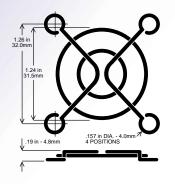
#### SC30-W1



Ring Diameter: 1.6 mm Rib Diameter: 1.6 mm

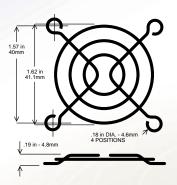
#### 40mm (1.5")

SC40-W2



Ring Diameter: 1.6 mm Rib Diameter: 1.6 mm

SC50-W2



Ring Diameter: 1.6 mm Rib Diameter: 1.6 mm

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Standard wire form fan

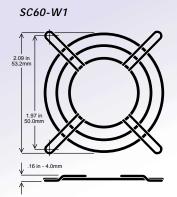
guards designed for use with fan sizes from 25mm through 254mm. Over 100 standard designs. Standard finishes in bright nickel chrome and black electro deposit.

Wire Form Guard Specs

Most guards meet safety agency requirements.

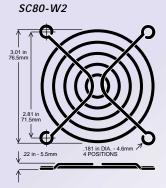
Questions or To Order: (262) 634-5560

#### 60mm (2.5")



Ring Diameter: 1.6 mm Rib Diameter: 1.6 mm

#### <u>80mm (3.15")</u>



Ring Diameter: 1.8 mm Rib Diameter: 1.8 mm SC80-W4

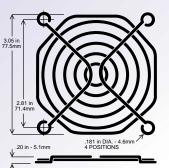
.17 in - 4.4mm

Ring Diameter: 1.6 mm

Rib Diameter: 1.6 mm

SC60-W2

2.09 in 53.2mm 1.9 50.0



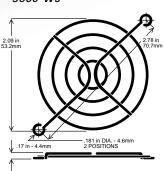
.181 in DIA. - 4.6mm 4 POSITIONS

Ring Diameter: 1.8 mm Rib Diameter: 1.8 mm

SC80-W7

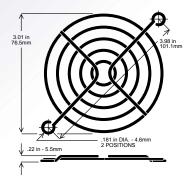
.14 in - 3.5mm

2.95 in 75.0mm SC60-W3



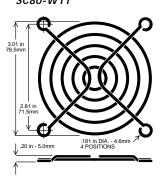
Ring Diameter: 1.6 mm Rib Diameter: 1.6 mm

SC80-W5



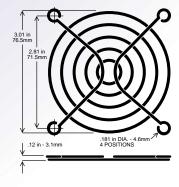
Ring Diameter: 1.8 mm Rib Diameter: 1.8 mm

SC80-W11



Ring Diameter: 1.6 mm Rib Diameter: 1.6 mm

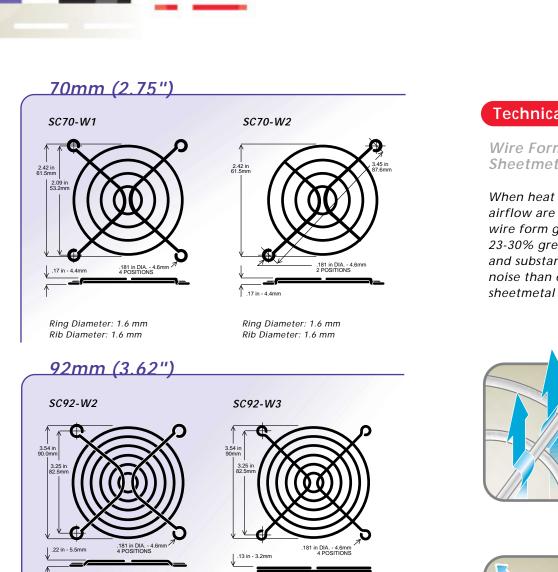
SC80-W6



Ring Diameter: 1.8 mm Rib Diameter: 1.8 mm Ring Diameter: 1.8 mm Rib Diameter: 1.8 mm



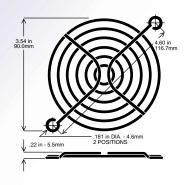




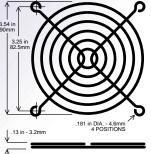
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Ring Diameter: 1.6 mm Rib Diameter: 1.8 mm

SC92-W5

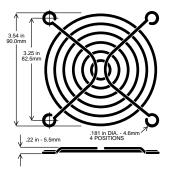


Ring Diameter: 1.6 mm Rib Diameter: 1.8 mm



Ring Diameter: 1.6 mm Rib Diameter: 1.8 mm

SC92-W7

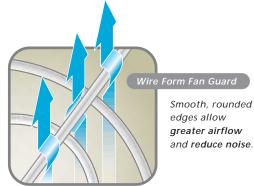


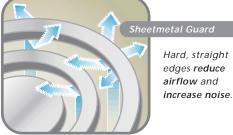
Ring Diameter: 1.6 mm Rib Diameter: 1.6 mm



Wire Form Fan Guards vs. Sheetmetal Guards

When heat dissipation, noise and airflow are critical design elements, wire form guard designs allow for 23-30% greater airflow, heat removal and substantially less objectionable noise than even the optimum sheetmetal guard.

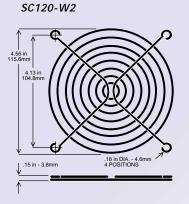




Hard, straight edges reduce airflow and

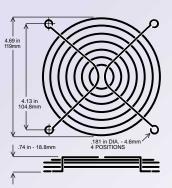
three

#### 120mm (4.7")

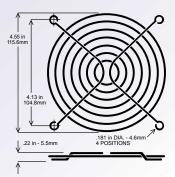


Ring Diameter: 1.8 mm Rib Diameter: 1.8 mm

SC120-W3

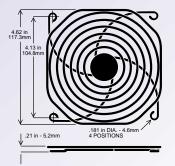


Ring Diameter: 1.8 mm Rib Diameter: 1.8 mm SC120-W4

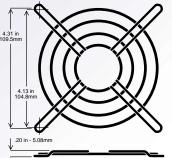


Ring Diameter: 1.8 mm Rib Diameter: 1.8 mm

SC120-W6

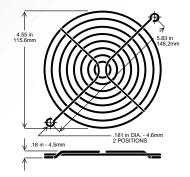


Ring Diameter: 1.6 mm Rib Diameter: 2.0 mm SC120-W8



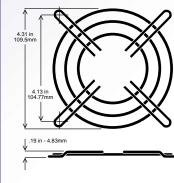
Ring Diameter: 1.6 mm Rib Diameter: 1.6 mm

#### SC120-W10

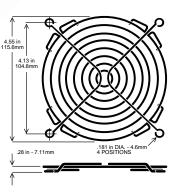


Ring Diameter: 1.8 mm Rib Diameter: 2.0 mm

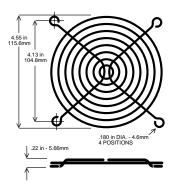
SC120-W14



Ring Diameter: 1.6 mm Rib Diameter: 1.6 mm SC120-W15



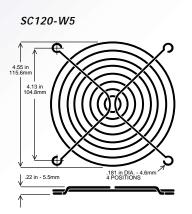
Ring Diameter: 1.8 mm Rib Diameter: 2.0 mm SC120-W16



Ring Diameter: 1.8 mm Rib Diameter: 2.3 mm



6.31 in



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Ring Diameter: 1.8 mm Rib Diameter: 1.8 mm

SC120-W13

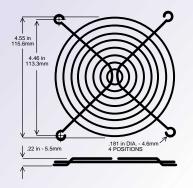
4.13 in 104.8mr

.22 in - 5.7mm

Ring Diameter: 1.8 mm Rib Diameter: 2.3 mm

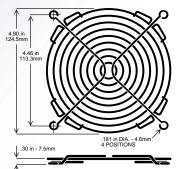
#### <u>127mm (5.0")</u>

#### SC130-W1



Ring Diameter: 1.8 mm Rib Diameter: 2.3 mm

SC130-W3



Ring Diameter: 1.8 mm Rib Diameter: 2.0 mm

SC162-W3

.20 in - 5.0mm

6.37 161.9r

#### SC130-W4

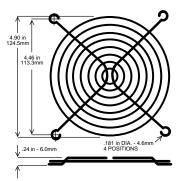
Ring Diameter: 1.8 mm

Rib Diameter: 2.3 mm

SC130-W2

4.55 in 115.6m

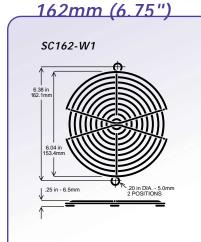
.22 in - 5.5r



.181 in DIA. - 4.6mm 4 POSITIONS

Ring Diameter: 1.8 mm Rib Diameter: 2.3 mm

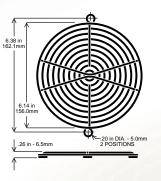
162mm continued on page six.



.181 in DIA. - 4.6mm ' 4 POSITIONS

Ring Diameter: 1.8 mm Rib Diameter: 2.3 mm Ring Diameter: 1.6 mm Rib Diameter: 2.0 mm

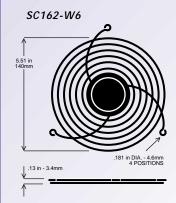
5.6 in DIA. - 43.2mm 2 POSITIONS SC162-W5

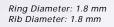


Ring Diameter: 1.8 mm Rib Diameter: 2.3 mm

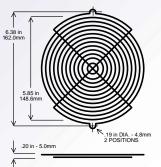
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#### 162mm (6.75") continued









Ring Diameter: 2.0 mm Rib Diameter: 2.0 mm

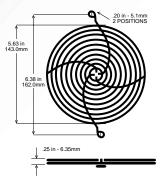
SC162-W13

.24 in - 6.1mm

Ring Diameter: 1.6 mm

Rib Diameter: 1.6 mm

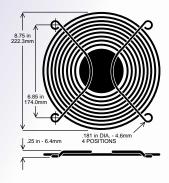
SC162-W10



Ring Diameter: 1.6 mm Rib Diameter: 2.0 mm

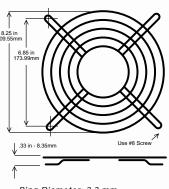
<u>254mm (8.75")</u>

SC1000-W1



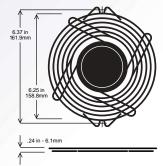
Ring Diameter: 2.3 mm Rib Diameter: 2.3 mm

SC1000-W2 SC1000-W3 SC1000-W10 8.75 222.3 6.85 173.99 .181 in DIA. - 4.6mm 4 POSITIONS 250 in - 6.35mm .33 in - 8.35mm .181 in DIA. - 4.6mm 4 POSITIONS .25 in - 6.45mm 1 Ring Diameter: 2.3 mm Ring Diameter: 2.3 mm Ring Diameter: 2.3 mm Rib Diameter: 2.3 mm Rib Diameter: 2.3 mm



Rib Diameter: 2.3 mm

SC162-W12



Ring Diameter: 1.6 mm Rib Diameter: 1.6 mm

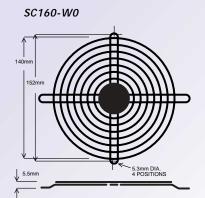




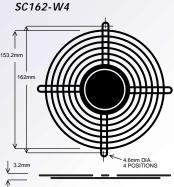
## WIRE FORM FAN GUARDS INTERNATIONS

GardTec fan accessories are in use throughout the world. The international standards and safety agencies require demanding and specific application and design requirements. International fan accessories are designed and manufactured under standards that recognize the various environmental considerations, such as plating. International products are designed and manufactured to meet all specific application needs, up to a maximum diameter of 780mm. GardTec offers a no cost design and tooling program for qualified international customers.

- Europe
- Asia
- Mexico
- Central America
- South America



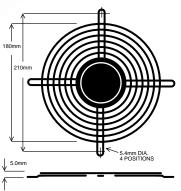
Ring Diameter: 1.8 mm Rib Diameter: 1.8 mm



Ring Diameter: 1.6 mm Rib Diameter: 1.4 mm SC162-W7

SC162-W16

Ring Diameter: 1.6 mm Rib Diameter: 1.6 mm SC180-W1



Ring Diameter: 1.6 mm Rib Diameter: 1.6 mm The guard sizes represented here are just a sampling of what we offer for international configurations. Please contact us for more sizes. If we don't have it, we can custom design a solution.

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Ring Diameter: 1.8 mm Rib Diameter: 1.8 mm

### WIRE FORM FAN GUARDS CUST CONFIGURATIONS

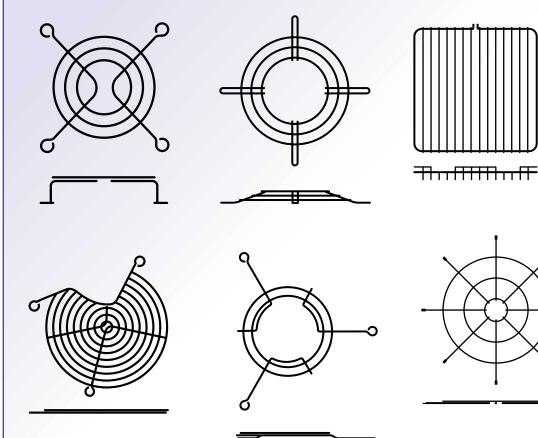
GardTec employs an in-house staff of the industry's most experienced team of design engineers and toolmakers, capable of designing and manufacturing the most difficult custom wire form products. Automation of the production process, coupled with the world's most technologically advanced manufacturing techniques, ensure our customers of the highest quality product. Custom wire forms are produced up to 30 inches in diameter. GardTec offers a no cost design and tooling program for qualified customers.

- Medical
- Automotive
- Lighting
- Heating
- Food Industry
- Computer
- Industrial Electronics
- Consumer Products
- Telecommunications
- Office Automation



e i g h t

Finishes in bright nickel chrome, black, gold or any Pantone color.



The guard configurations represented here are just a sampling of what we offer.

PLASTIC FAN GUARDS

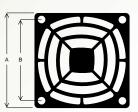


Plastic Guard Specs

Plastic fan guards are designed for use with fan sizes 40 mm through 162/172 mm. Designs allow for the greatest amount of air passage, while creating very low levels of noise. Plastic guards offer low cost protection, standard color is black, custom colors available. Plastic material is UL rated at 94V-0.

#### Thru Hole Plastic Guards

Designed to allow mounting hardware to pass through mounting holes and attach directly onto fan or housing.





	Fits Fan Size	Part Number	А	В	С
	40 mm	SC40-P10	1.57 in. 40.0 mm	1.26 in. 32.0 mm	0.25 in. 6.4 mm
Ø	60 mm	SC60-P10	2.34 in. 59.4 mm	1.97 in. 50.0 mm	0.25 in. 6.3 mm
	80 mm	SC80-P10	3.15 in. 80.0 mm	2.81 in. 71.4 mm	0.25 in. 6.4 mm
	80 mm	SC80-P40	3.15 in. 80.0 mm	2.81 in. 71.4 mm	0.13 in. 3.3 mm
	92 mm	SC92-P10	3.63 in. 92.2 mm	3.25 in. 82.5 mm	0.25 in. 6.3 mm
	92 mm	SC92-P40	3.63 in. 92.0 mm	3.25 in. 82.5 mm	0.13 in. 3.3 mm
	120 mm	SC120-P10	4.72 in. 120.0 mm	4.13 in. 104.8 mm	0.28 in. 7.0 mm
	120 mm	SC120-P35	4.72 in. 120.0 mm	4.13 in. 104.8 mm	0.13 in. 3.3 mm
	120 mm	SC120-P40	4.72 in. 120.0 mm	4.13 in. 104.8 mm	0.10 in. 2.5 mm
	162 mm	SC162-P10	6.38 in. 162.0 mm	6.38 in. 162.0 mm	0.31 in. 8.0 mm

#### Push-on Plastic Guards

Designed for applications where speed of assembly and material cost are primary application considerations. These snap-on guards require no mounting hardware, they simply press through existing fan mounting holes for a secure fit.

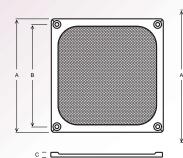


Fits Fan Size	Part Number	А	В	С
80 mm	SC80-P30	3.15 in. 80.0 mm	2.81 in. 71.4 mm	0.16 in. 4.1 mm
92 mm	SC92-P30	3.63 in. 92.0 mm	3.25 in. 82.5 mm	0.16 in. 4.1 mm
120 mm	SC120-P30	4.72 in. 120.0 mm	4.13 in. 104.8 mm	0.18 in. 4.6 mm
127 mm	SC130-P25	5.0 in. 127.0 mm	4.46 in. 113.3 mm	0.18 in. 4.6 mm

#### ALUMINUM FAN FILTERS

#### **Aluminum Fan Filters**

Aluminum/Stainless filters offer high levels of air passage while efficiently filtering contaminants and shielding EMI/RFI. Their tightly woven stainless corrugated mesh screen offers the highest performance. Designed to fit all 60mm, 80mm, 92mm, 120mm and 162mm tube axial fans, filters may be mounted directly onto the fan or to any other housing. Standard finishes Mill and Electro Black Deposit.



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Figure 1

Figure 2

Fits Fan Size	Figure	Part Number	A	В	С	Mounting Hole Dia
60 mm	1	AFM-60M	2.36 in. 60.0 mm	1.97 in. 50.0 mm	0.169 in. 4.3 mm	0.17 in. 4.3 mm
80 mm	1	AFM-80M	3.15 in. 80.0 mm	2.8 in. 71.4 mm	0.175 in. 4.5 mm	0.17 in. 4.3 mm
92 mm	1	AFM-92M	3.6 in. 92.0 mm	3.25 in. 82.5 mm	0.170 in. 4.3 mm	0.17 in. 4.3 mm
120 mm	1	AFM-120M	4.7 in. 120.0 mm	4.13 in. 104.8 mm	0.175 in. 4.5 mm	0.17 in. 4.3 mm
127mm	1	AFM-127M	5.0 in. 127.0mm	4.46in. 113.3mm	0.175 in. 4.5mm	0.17 in. 4.3mm
162 mm	2	AFM-162M	7.2 in. 182.0 mm	6.38 in. 162.0 mm	0.170 in. 4.2 mm	0.17 in. 4.3 mm

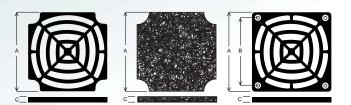
If ordering Black Electro finish, please substitute the letter "B" for the letter "M" in the Part Number column (i.e. AFM-60B).

#### Plastic Fan Filter Assemblies (Square 40-60 mm)

GardTec offers the broadest line of plastic fan filter assemblies in the industry. The assemblies consist of a finger guard, foam filter and retainer. The guards and retainer are manufactured using high impact plastics which all meet UL94-VO flammability requirements. The foam filter is manufactured to meet UL94HF1 smoke generation requirements.

#### Fits Fan Size 40 mm (1.57") Square

Part Number	Description	Α	В	С
SC40-P15/30	Retainer, Filter, Guard 30PPI	1.57 in. 40.0 mm	1.26 in. 32.0 mm	0.24 in. 6.10 mm
SC40-P15/45	Retainer, Filter, Guard 45PPI	1.57 in. 40.0 mm	1.26 in. 32.0 mm	0.24 in. 6.10 mm
SC40-P10	Guard	1.57 in. 40.0 mm	1.26 in. 32.0 mm	0.24 in. 6.10 mm
SC40-P05	Retainer	1.46 in. 37.08 mm		0.13 in. 3.30 mm
SC40-M30	Filter - 30PPI	1.46 in. 37.08 mm		0.12 in. 3.30 mm
SC40-M45	Filter - 45PPI	1.46 in. 37.08 mm		0.12 in. 3.30 mm

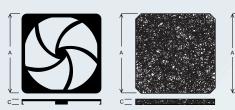


#### Fits Fan Size 60 mm (2.36") Square

Part Number	Description	Α	В	С
SC60-P15/30	Retainer, Filter, Guard 30PPI	2.36 in. 60.0 mm	1.97 in. 50.0 mm	0.26 in. 6.60 mm
SC60-P15/45	Retainer, Filter, Guard 45PPI	2.36 in. 60.0 mm	1.97 in. 50.0 mm	0.26 in. 6.60 mm
SC60-P10	Guard	2.34 in. 59.44 mm	1.97 in. 50.0 mm	0.26 in. 6.60 mm
SC60-P05	Retainer	2.21 in. 56.10 mm		0.12 in. 2.80 mm
SC60-M30	Filter - 30PPI	2.20 in. 55.88 mm		0.11 in. 2.80 mm
SC60-M45	Filter - 45PPI	2.20 in. 55.88 mm		0.11 in. 2.80 mm



#### Plastic Fan Filter Assemblies (Square 80-120 mm)





#### Fits Fan Size 80 mm (3.15") Square

Part Number	Description	A	В	С
SC80-P15/30	Retainer, Filter,	3.29 in.	2.81 in.	0.39 in.
	Guard 30PPI	83.50 mm	71.40 mm	9.90 mm
SC80-P15/45	Retainer, Filter,	3.29 in.	2.81 in.	0.39 in.
	Guard 45PPI	83.50 mm	71.40 mm	9.90 mm
SC80-P15/60	Retainer, Filter,	3.29 in.	2.81 in.	0.39 in.
	Guard 60PPI	83.50 mm	71.40 mm	9.90 mm
SC80-P15/100	Retainer, Filter,	3.29 in.	2.81 in.	0.39 in.
	Guard 100PPI	83.50 mm	71.40 mm	9.90 mm
SC80-P10	Guard	3.15 in. 80.00 mm	2.81 in. 71.40 mm	0.26 in. 9.90 mm
SC80-P05	Retainer	3.29 in. 83.50 mm		0.39 in. 3.30 mm
SC80-Mxx	Filter– Media 30/45/60/100PPI	3.06 in. 77.70 mm		0.13 in. 3.30 mm

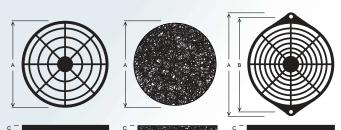
#### Fits Fan Size 92 mm (3.62") Square

Part Number	Description	А	В	С
SC92-P15/30	Retainer, Filter,	3.77 in.	3.25 in.	0.40 in.
	Guard 30PPI	95.80 mm	82.60 mm	10.20 mm
SC92-P15/45	Retainer, Filter,	3.77 in.	3.25 in.	0.40 in.
	Guard 45PPI	95.80 mm	82.60 mm	10.20 mm
SC92-P15/60	Retainer, Filter,	3.77 in.	3.25 in.	0.40 in.
	Guard 60PPI	95.80 mm	82.60 mm	10.20 mm
SC92-P15/100	Retainer, Filter,	3.77 in.	3.25 in.	0.40 in.
	Guard 100PPI	95.80 mm	82.60 mm	10.20 mm
SC92-P10	Guard	3.62 in. 92.00 mm	3.25 in. 82.60 mm	0.28 in. 7.10 mm
SC92-P05	Retainer	3.77 in. 95.80 mm		0.40 in. 10.20 mm
SC92-Mxx	Filter– Media 30/45/60/100PPI	3.55 in. 90.20 mm		0.13 in. 10.20 mm

#### Fits Fan Size 120 mm (4.69") Square

Part Number	Description	Α	В	С
SC120-P15/30	Retainer, Filter, Guard 30PPI	4.88 in. 122.00 mm	4.13 in. 104.90 mm	0.44 in. 11.20 mm
SC120-P15/45	Retainer, Filter, Guard 45PPI	4.88 in. 122.00 mm	4.13 in. 104.90 mm	0.44 in. 11.20 mm
SC120-P15/60	Retainer, Filter, Guard 60PPI	4.88 in. 122.00 mm	4.13 in. 104.90 mm	0.44 in. 11.20 mm
SC120-P15/100	Retainer, Filter, Guard 100PPI	4.88 in. 122.00 mm	4.13 in. 104.90 mm	0.44 in. 11.20 mm
SC120-P10	Guard	4.62 in. 117.3 mm	4.13 in. 104.90 mm	0.44 in. 7.10 mm
SC120-P05	Retainer	4.88 in. 122.00 mm		0.44 in. 11.20 mm
SC120-Mxx	Filter– Media 30/45/60/100PPI	4.56 in. 115.80 mm		0.13 in. 3.30 mm

#### <u>(Round 162 mm)</u>

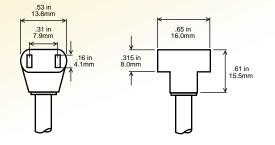


#### Fits Fan Size 162 mm (6.38") Round

Part Number	Description	А	В	С
SC162-P15/45	Retainer, Filter, Guard 45PPI	7.06 in. 179.30 mm	6.38 in. 162.00 mm	0.31 in. 7.90 mm
SC162-P15/60	Retainer, Filter, Guard 60PPI	7.06 in. 179.30 mm	6.38 in. 162.00 mm	0.31 in. 7.90 mm
SC162-P10	Guard	7.06 in. 179.30 mm	6.38 in. 162.00 mm	0.31 in. 7.90 mm
SC162-P05	Retainer	5.98 in. 151.90 mm		0.18 in. 4.60 mm
SC162-Mxx	Filter– Media 45/60PPI	5.93 in. 150.60 mm		0.12 in. 3.00 mm

#### FAN POWER CORDS

#### <u>STYLE HP25 "T" Plug</u>



#### STYLE HP50 "90" PLUG

GardTec offers the HP25 "T" style plug in whatever cord length you desire. When ordering just add the length you need in inches as the last number. Order example: HP25-39.5 would be 39.5 inches.

We also have standard lengths available if you'd like in 12", 24", 36", 40", 48", 50", 60" and 80".

GardTec offers the HP50 "90" style plug in whatever cord length you desire. When ordering just add the length you need in inches as the last number. Order example: HP50-28 would be 28 inches.

We also have standard lengths available if you'd like in 12", 24", 36", 40", 48", 50", 60" and 80".

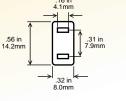
GardTec offers the HP75 "45" style plug in whatever cord length you desire. When ordering just add the length you need in inches as the last number. Order example: HP75-45.25 would be 45.25 inches.

We also have standard lengths available if you'd like in 12", 24", 36", 40", 48", 50", 60" and 80".

#### STYLE HP100 "Straight" Plug

.75 in 19.0mn





.51 in 12.9mm

.31in 7.9mm

П

D

.16 in 4 1 mm

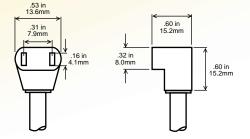
8.0mm .315

> .69 in 17.6mm .92 in 23.11mm

GardTec offers the HP100 "Straight" style plug in whatever cord length you desire. When ordering just add the length you need in inches as the last number. Order example: HP100-14 would be 14 inches.

We also have standard lengths available if you'd like in 12", 24", 36", 40", 48", 50", 60" and 80".





#### STYLE HP75 "45°" Plua

.34 in 18.7mm

(t)welve



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GardTec offers the industry's most complete line of UL and CSA standard fan power cords, designed to be used with tube axial fans.

Fan cords are designed to meet specific customer requirements, including terminal connections, heat shrink, labeling, stripping, and tinning.

Three conductor cords and complete wire harness assemblies are available using cordage rated at 105°C, 300 volts.

Red tracer cords for use with D.C. fans are available in all head configurations and lengths.

(**UL**) UL listed (E189621, E156798)





#### **Daisy Chain Fan Cords**

Daisy Chain fan power cords are designed to allow users of multiple cooling fans to connect from 2 to 10 fans with a single assembly. These unique designs allow for virtually any distance between each fan plug head, to easily handle those complicated applications. Daisy Chains are UL/CSA approved, eliminate costly excessive wiring and reduce costly labor, while enhancing the overall performance and safety.

**NEMA Fan Cords** 

NEMA style fan cord assemblies are available in any fan plug head configuration, cord length is to customer specifications. Fan cords are available in 2 and 3 conductor styles.

2 to 10 fans with

GardTec Incorporated 2909 Mt. Pleasant Street Racine, WI USA 53404-1837

#### Phone: (262) 634-5560 Fax: (262) 634-6182

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