# STOCK FLEXIBLE FOIL HEATERS



### Description

Calesco has a selection of heaters available on stock for immediate delivery to customers. The heaters are designed to a certain resistance and can be operated under different voltages to give different power as shown in the tables below. The heaters can be incorporated directly into a heating application, if the performance is right, or be used as a test heater to figure out the appropriate surface power for the specific application before ordering a tailor made heater.

Note: At surface power over ca  $0,4/\mbox{cm}^2$  the heater requires good contact with a suitable heat sink.

Specification for each heater type can be found in the corresponding data sheet.

#### >> Silicone

Silicon rubber is a rugged, flexible material with excellent temperature properties, max 230°C. Fiberglass-reinforced silicone rubber gives your heater dimension stability without sacrificing flexibility. The silicone heater is chemical resistant and can be cold laminated with adhesive to various surfaces.

						12V	24V	48V	110V	230V	400V
Part No.	X (mm)	Y (mm)	Туре	Area (cm²)	Resistance (Ohm)	Power (W)	Power (W)	Power (W)	Power (W)	Power (W)	Power (W)
SI107844-00	25	50	=	12.5	56,9	2.5	10.1	40.5	-	-	-
SI102985-00	25	50	=	12.5	28,5	5.0	20.0	80.0	-	-	-
SI102987-00	50	50	=	25	28.8	5.0	20.0	80.0	-	-	-
SI102989-00	50	100	=	50	14.4	10.0	40.0	160.0	-	-	-
SI102991-00	95	110	=	100	150.5	-	-	15.3	80.0	350.3	-
SI102993-00	95	200	=	200	75.5	-	-	30.5	160.3	700.7	-
SI102995-00	95	200	=	200	331	-	-	-	36.6	159.8	483.4
SI102997-00	190	200	=	400	38,2	-	-	60	316,7	1384	-
SI102999-00	190	200	=	400	165	-	-	-	73.3	320.6	969.7
SI103001-00	190	300	=	600	110	-	-	-	110.0	480.9	1454.5
SI103003-00	ø 50	-	=	20	18.9	7.6	30.5	-	-	-	-
SI103005-00	ø 70	-	=	38	19.2	7.5	30.0	120.0	-	-	-
SI103007-00	ø 100	-	=	79	9	16.0	64.0	256.0	-	-	-
SI103009-00	ø 150	-	=	177	16.5	-	34.9	139.6	733.3	-	-
SI103011-00	ø 200	-	=	314	211.5	-	-	-	57.2	250.0	756.1

Type (form)



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### >> Polyimide

Polyimide is a thin, semi-transparent material with excellent dielectric strength. It is also resistant to most chemical acids and basis. Temperature range as low as  $-271^{\circ}$ C (liquid helium) and as high as 200°C.

						1,5V	ЗV	4,5V	6V	9V	12V	24V	48V
Part No.	X (mm)	Y (mm)	Туре	Area (cm²)	Resistance (Ohm)	Power (W)							
PI102831-00	25	50	=	12.5	1.9	1.2	4.7	10.7	18.9	-	-	-	-
PI102833-00	50	50	=	25	3.6	0.6	2.5	5.6	10.0	22.5	40.0	-	-
PI102835-00	50	100		50	1.8	1.3	5.0	11.3	20.0	45.0	80.0	-	-
PI102837-00	100	100		100	3.6	-	2.5	5.6	10.0	22.5	40.0	160.0	-
PI102839-00	100	200	=	200	1.8	-	5.0	11.3	20.0	45.0	80.0	320.0	-
PI102841-00	195	200	=	400	3.6	-	-	-	10.0	22.5	40.0	160.0	640.0
PI102843-00	195	300	=	600	2.4	-	-	-	15.0	33.8	60.0	240.0	960.0

#### >> Micanite

The Mica heaters are an etched foil element, sandwiched between layers of mica. Mica material creates a fairly rigid heater, but is also able to handle extreme temperatures. For use at lower temperatures (below 100°C), it works perfect as a stand-alone heater. However, higher temperatures require proper support and even pressure to provide good heat transfer. For example, it can be uniformly clamped between two metal plates.

							24V	48V	110V	230V	400V
Part No.	X (mm)	Y (mm)	Туре	Area (cm²)	Resistance (Ohm)	Power (W)	Power (W)	Power (W)	Power (W)	Power (W)	Power (W)
MI102981-01	100	100	=	100	353.0	-	-	6.5	34.3	149.9	453.3
MI102983-01	180	200	=	400	88.35	-	-	26	136,9	598,7	1810