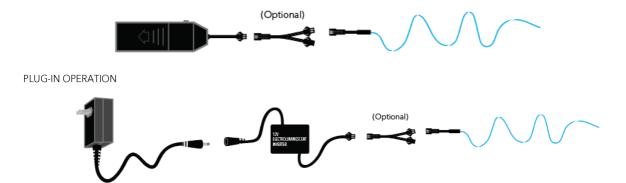


# TECHNICAL DATA SHEET: SEWGLO™ ILLUMINATED THREAD

SewGlo™ illuminated thread can be a direct replacement for common thread, capable of hand or machine stitching, embroidery, flat knitting, weaving and wiring. Below are the current specifications and testing data performed on the SewGlo™ thread to date. For volume inquiries or custom testing information of SewGlo™ or customization option, please feel free to contact us for more information.

#### **WIRING DIAGRAM:**

BATTERY OPERATION



#### **TECHNICAL PARAMETERS:**

PARAMETER	MIN	MAX
SIZE:	0.2mm	0.5mm
MIN BENDING DIA	0.1mm	NA
WORKING TEMPERATURE	-30°C	150°C
STORING TEMPERATURE	5°C	25°C
ELONGATION	0	30%
WATER RESISTANCE	NA	UP TO 3M
CONDUCTORS	2	2
INPUT VOLTAGE (AC)	40V AC	180V AC
INPUT FREQUENCY (Hz)	600Hz	8000Hz
STRENGTH (Newtons)	ON	8N



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## **UV RESISTANCE**

TECHNICAL TEST	HRS	DEGREDATION
UV STABILITY RUNTIME	100	1%
100V @ 400Hz	500	5%
	1000	10%
	2000	15%
	3000	20%
	4000	25%
	5000	28%

## TEMPERATURE RESISTANCE

TECHNICAL TEST	DAY	DEGREDATION
HIGH TEMP	1	0%
70° C	7	1%
	14	2%
	28	4%

## WATER RESISTANCE

TECHNICAL TEST	TEST	DEGREDATION
WATER RESISTANCE	SPLASH (<5 SEC)	PASS
10cm DEEP	SUBMERGE	
	1 HR	PASS
	24HR	PASS

## **FLEX RESISTANCE**

TECHNICAL TEST	TEST(CYCLES)	PASS/FAIL
BENDING	1000	PASS
5mm RADIUS	5000	PASS
	10000	PASS

## **BRIGHTNESS**

TECHNICAL TEST	COLOR	BRIGHTNESS
100V @ 1000Hz	TEAL	80 cd/m
	BLUE	75cd/m
	GREEN	75cd/m
	YELLOW	70cd/m
	PEACH	68cd/m
	LIGHT PINK	65cd/m
_	PINK	62cd/m
	LAVENDER	58cd/m

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#### CONNECTING

If you are looking to connect SewGlo™ thread to a connector or wire, use the QR Code below to follow along!

DOWNLOAD STEP BY STEP GUIDE



WATCH VIDEO



#### FAQ

#### What is SewGlo<sup>™</sup> Wire?

SewGlo<sup>TM</sup> Wire is a brand-new technology that is similar in nature to EL Wire, but MUCH smaller. Typical EL Wire is around 1-5mm in DIA, and SewGlo<sup>TM</sup> is only 0.3-0.4mm DIA. A uber-flexible alternative allows the product to be sewn directly to nearly any type of fabric, and provide a lit accent to anything it touches. SewGlo<sup>TM</sup> Wire is flexible, efficient and all kinds of fun. It requires an inverter to operate, which operates on a frequency between 800-6500Hz. Many times, batteries or inverters tend to operate in an audible range, so depending on the battery or inverter you are using, you may hear a high-pitched frequency when operating. If you are looking for a custom solution that reduces noise up to 95%, please feel free to call or email us.

#### Does SewGlo<sup>™</sup> Wire Need An Inverter?

Yes. All Electroluminescent material needs an inverter to operate. The inverter sends a specific voltage and frequency to the phosphor layer through the wire. This excites the phosphor particles inside and creates a beautiful glow.

#### • Can SewGlo™ Wire Be Cut?

Yes, SewGlo™ Wire can be cut at any point along the line. The wire will continue to glow to the point where it is cut. We recommend to snip with a pair of sharp scissors, and apply a dab of waterproof glue at the end. This will keep debris and moisture out of the wire and keep it lasting time after time.

#### How Do You Cut and Connect SewGlo™ Wire?

For information on how to connect please contact us.

### Can EL Wire Customized?

Yes, we offer customized wire and lengths for many different applications. If you have a project in mind, please feel free to contact us and we will be happy to help. We offer both custom cutting and connecting services as well as custom embroidery and sewing.

#### Do You Make Custom SewGlo™ Wire Inverters?

Yes, for any custom inquiries or bulk purchases, please contact us via phone or email.

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