

# ENTTEC SMART PXL 40 DOT

High Resolution Smart 40mm RGB pixel dot. Default String of 20 with 125mm pitch



Robust and reliable, ENTTEC's high-resolution, individually-addressable SMART PXL 40 Dots are designed and made in Australia from marine grade aluminum to withstand the harshest of environments.

Easy to install and configure into any conceivable shape, SMART PXL dots create spectacular, crisp lighting effects while adding a stylish design element to your venue or installation chose between default options and custom items for

Engineered to take any architectural, commercial or entertainment project to the next level, the SMART PXL range has been created by lighting professionals for lighting professionals.

## FEATURES

- **Auto-addressing pixels for fast commissioning**
- **16-bit control for ultra-smooth dimming or option for simulated 8-bit control (ONLY with ENTTEC pixel controllers) for reduced channel quantity**
- **125mm default pixel pitch (customizable; min/max length: 125mm/2000mm)**
- **Default string 20 dots with premium IP-rated connectors at each end (length: 3375mm)**
- **SPXL 16-bit. Refer to [www.enttec.com/support/supported-led-pixel-protocols/](http://www.enttec.com/support/supported-led-pixel-protocols/) for list of compatible ENTTEC controllers**
- **This product requires an external DC power supply and data source for operation. (not included)**

## SPECIFICATIONS

<b>LED source</b>	6 pcs RGB SMD3535 - <i>Customization options available</i>	
<b>Lumens (lm)</b>	No diffuser	33
	Dome diffuser	24
	Flat diffuser	29
<b>Efficacy lm/watt</b>	No diffuser	22
	Dome diffuser	16
	Flat diffuser	19.3
<b>Control protocol</b>	ENTTEC SPXL-8 / SPXL-16	
<b>SPXL-8 footprint per dot (8-bit)</b>	3 DMX channels/dot Red   Green   Blue	
<b>SPXL-16 footprint per dot (16-bit)</b>	6 DMX slots/dot Course   Fine   Course   Fine   Course   Fine	
<b>Pixel ordering</b>	SPXL-8: R-G-B SPXL-16: R-R-G-G-B-B	
<b>Colour resolution (8-bit)</b>	$2^8 \times 2^8 \times 2^8 = 16.7$ million (Note 1)	
<b>Colour resolution (16-bit)</b>	$2^{16} \times 2^{16} \times 2^{16} = 68$ billion (Note 2)	
<b>Dots controllable per DMX universe:</b>	SPXL-8:	170 dots
	SPXL-16:	85 dots
<b>Projected lumen maintenance</b>	50,000 hrs (L70) - within the working temperature range	
<b>Body material</b>	Machined and anodized 6032 aluminum body	
<b>Base dot size</b>	47 x 57 x 13 mm	
<b>Dot pitch</b>	Default: 125mm (8 dots/m) - <i>Customization options available</i>	
<b>Weight</b>	1.00 kg (string of 20 dots)	
<b>IP rating</b>	IP67	
<b>Operating temperature</b>	-20°C to +50°C	
<b>Heat dissipation (maximum)</b>	1.5 Watts	
<b>Input voltage</b>	24 V DC	
<b>Maximum power</b>	1.6 W/dot (1.4W nominal)	
<b>Maximum current draw</b>	60 mA/dot	
<b>Rated current throughput capacity 10A</b>	10A	
<b>Cable resistance</b>	0.0132 Ohm/m	
<b>Cable thickness</b>	16AWG	
<b>Incoming cable length (connector to first dot)</b>	Default: 500mm <i>Customization options available</i>	
<b>Outgoing cable length (last dot to connector)</b>	Default: 500mm <i>Customization options available</i>	
<b>Connector type</b>	Default: AMPHENOL AT Series <i>Customization options available</i>	
<b>Connector gender</b>	In	Male
	Out	Female
<b>Connector pinout</b>	Pin 1	GND
	Pin 2	Data+
	Pin 3	Not Connected
	Pin 4	+24v
<b>Warranty</b>	3 Year Return to Base Manufacturer Warranty	

## INFORMATION

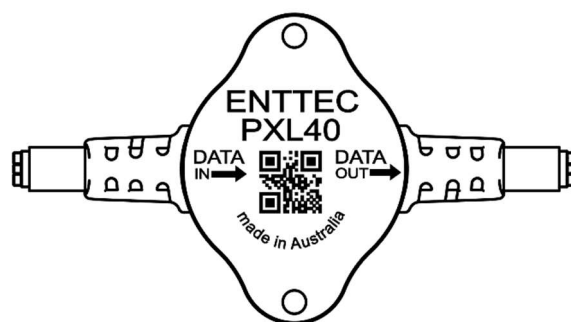
### Connecting SMART PXL dots

Use any 24v compatible ENTTEC pixel controller to control the SMART PXL Dot 40. For the latest information visit:

[www.enttec.com/range/controls/addressable-led-pixel-control/](http://www.enttec.com/range/controls/addressable-led-pixel-control/).

### Data direction

The pixel data in the SMART PXL 40 Dot must travel in a specific direction for it to function. This direction can be identified through the laser etching on the base of the first and last dot of each string:



### Installation

Always refer to this product's installation guide and safety notes before handling this product or specifying it on your project. If unsure consult ENTTEC.

### Certification

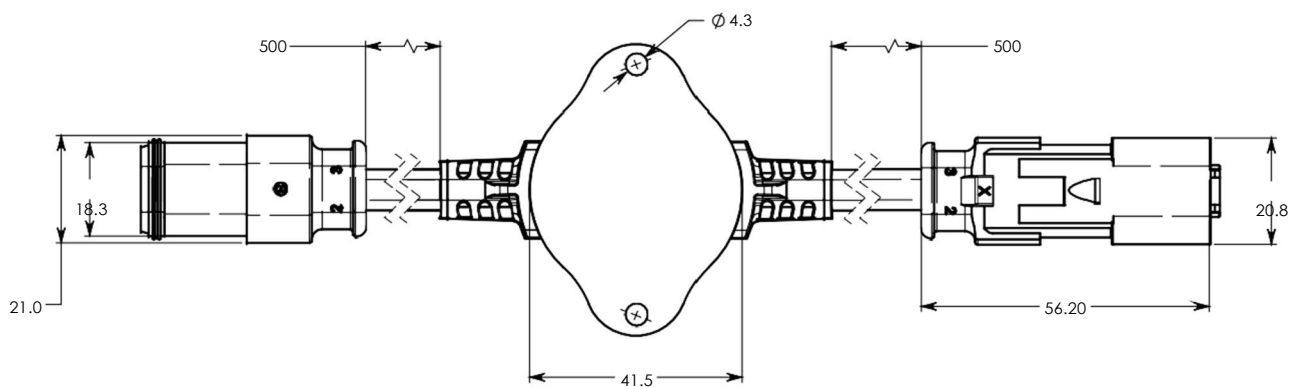
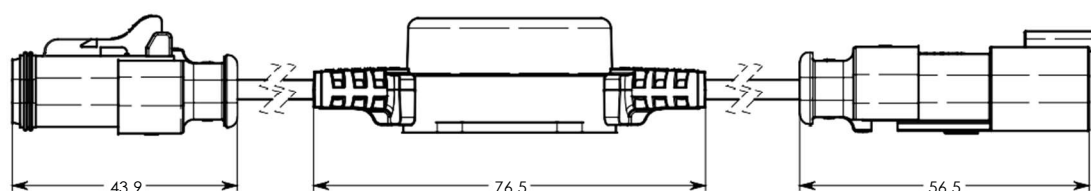
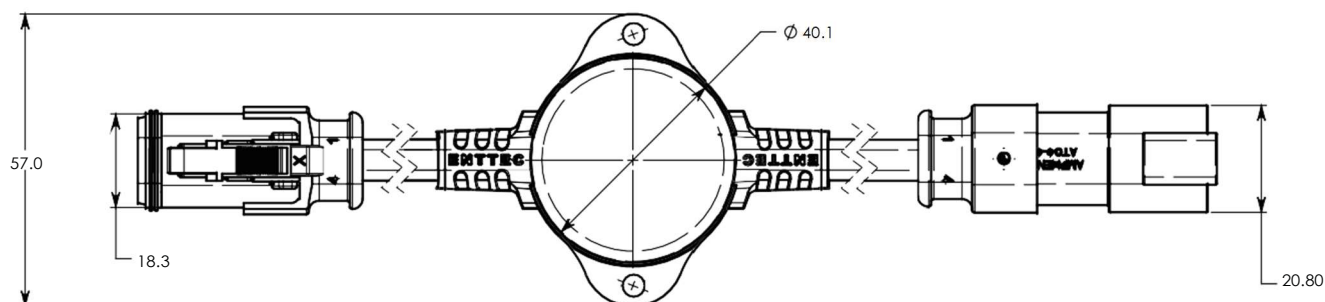
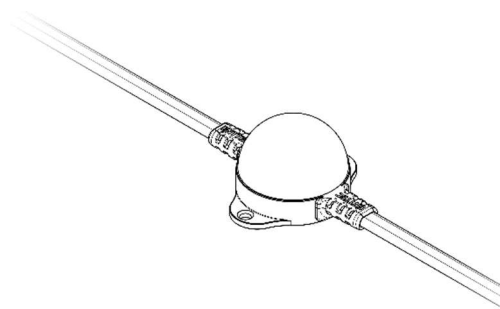


# PHYSICAL DIMENSIONS

All figures in mm.

## ■ SMART PXL 40 DOT + AMPHENOL CONNECTORS

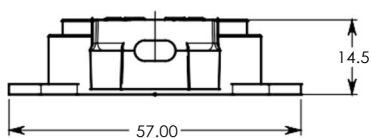
The following diagrams depict single dots and connectors.



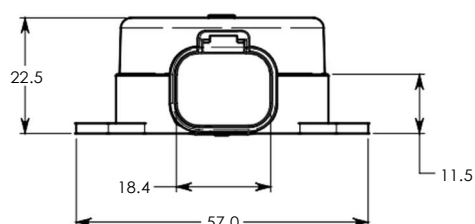
## DIFFUSER OPTIONS

Note: Diffusers are non-removable.

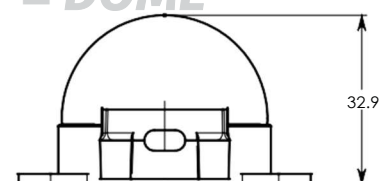
### ■ NONE



### ■ FLAT

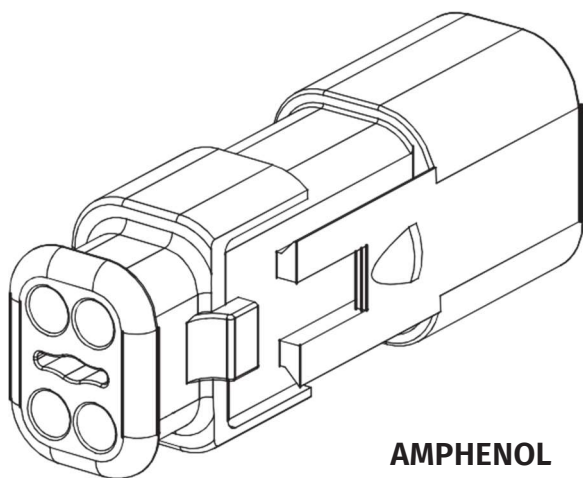


### ■ DOME



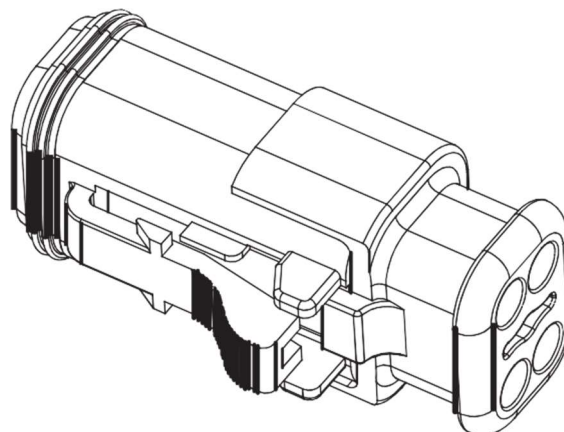
## PREMIUM CONNECTORS

For ultimate reliability, strings of SMART PXL 40 ship with Amphenol AT series connectors as default (compatible with DEUTSCH DT systems).



**AMPHENOL  
AT04-4P-SR02BLK**

4-way **RECEPTACLE**, male connector with strain relief, reduced diameter seal, black.



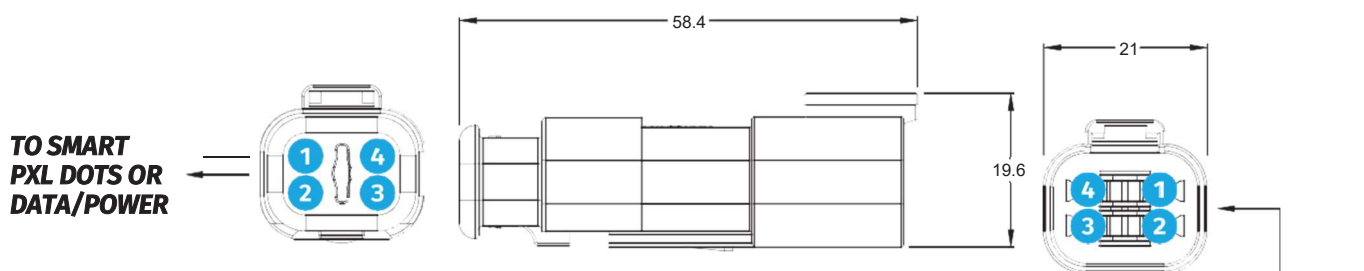
**AMPHENOL  
AT06-4S-SR02BLK**

4-way **PLUG**, female connector with reduced diameter seal (E-Seal), endcap, and strain relief, black.

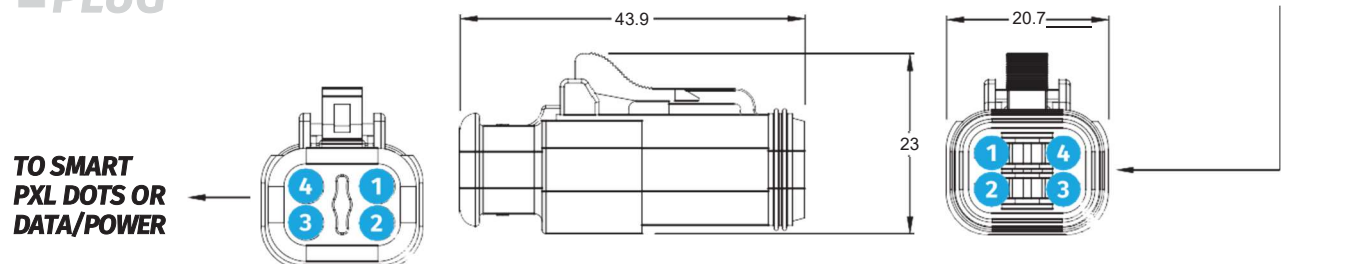
### Pin output configurations

PIN	PIN	PIN	PIN
1	2	3	4
GND	DATA	NC	+24V

#### ■ RECEPTACLE



#### ■ PLUG



## ORDERING INFORMATION

### SMART PXL 40 DOTS

Visit [website](#) to shop for SMART PXL 40 Dots.

To discuss customization options, contact our friendly sales team via [sales@enttec.com](mailto:sales@enttec.com).

ITEM	PART NUMBER
SMART PXL 40 Dot no diffuser/ 20 dots per string/ 125mm pitch/ 500mm lead in cable/ 500mm lead out cable/ RGB/ Default Body/ Amphenol AT male input/ Amphenol AT female output	73010-20-125-500-500-RGB-DFT-ATM-ATF
SMART PXL 40 Dot opal dome diffuser/ 20 dots per string/ 125mm pitch/ 500mm lead in cable/ 500mm lead out cable/ RGB/ Default Body / Amphenol AT male input/ Amphenol AT female output	73011-20-125-500-500-RGB-DFT-ATM-ATF
SMART PXL 40 Dot clear flat diffuser/ 20 dots per string/ 125mm pitch/ 500mm lead in cable/ 500mm lead out cable/ RGB/ Default Body / Amphenol AT male input/ Amphenol AT female output	73012-20-125-500-500-RGB-DFT-ATM-ATF

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*Due to constant innovation, information within this document is subject to change.*