



# Q-CAP WURM™ FOR TUNABLE APPLICATIONS

## 24VDC Flexible Fixtures



- Flexible encapsulated fixture
- Both helical bend and up/down bend
- 6" bend radius
- Interior and exterior rated (not including FC)
- Two mounting options available
- When using DALI and DMX power supplies, LED wattage must be doubled
- Do not cut Non-Field Cuttable Q-CAP flexible fixtures

### ORDERING PROCESS

**A** Specify Non-Field Cuttable Q-CAP

**B** (Optional) Specify field cuttable 4' piece - used to adjust total run length in the field (dry applications only)

### A. NON-FIELD CUTTABLE Q-CAP

A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
PRODUCT	MOUNTING	RATED	CCT	WATTAGE	LENS	WIRE INPUT/OUTPUT	CONNECTOR/WIRE IN	CONNECTOR/WIRE OUT	END CAPS	LENGTH (IN)	EXACT/OPTIMAL
					ENC/CL				WH		

Sample Part Number: **WURM-DW-WSCS-DRY-24/30-1.5HE-ENC/CL-P1-BW-BW-N/A-48"-E**

<b>A1</b> <b>PRODUCT</b> <b>WURM-DW</b> <b>WURM-DW-USA</b>  Select USA option for BA, BAA and BABA projects.  LED engine is built with 3 wires requiring 0-10v, DMX or DALI control. Using DALI, DMX, or non QTL power supplies may double watts/ft. See last page for compatible power supplies.	<b>A2</b> <b>MOUNTING</b> <b>MCS</b> Magnetic Clip Small <b>WSCS</b> White Snug Clip Small <b>BN-UD-SST-16'</b> 16' BENDIT Up/Down Stainless Steel Channel <b>BN-UD-SST-32'</b> 32' BENDIT Up/Down Stainless Steel Channel <b>BN-UD-WH-16'</b> 16' BENDIT Up/Down White Stainless Channel <b>BN-UD-WH-32'</b> 32' BENDIT Up/Down White Stainless Channel  White snug clip only for indirect cove use, not intended for hanging fixtures upside down.	<b>A3</b> <b>RATED</b> <b>DRY</b> IP20 <b>WET</b> IP67	<b>A4</b> <b>CCT</b> <b>24/30</b> 2400K/3000K <b>27/40</b> 2700K/4000K	<b>A5</b> <b>WATTAGE</b> <b>1.5HE</b> 1.5WHE-SO <b>2.5HE</b> 2.5WHE-HO  SO: Standard Output HO: High Output
<b>A6</b> <b>LENS</b> <b>ENC/CL</b> Encapsulated in Clear  For representation of LED visibility, see Diode Visibility section on following pages	<b>A7</b> <b>WIRE INPUT/OUTPUT</b> <b>S1</b> Single 1 (Input only) - End Feed  <b>P1</b> Pass Through 1 (Input/Output) - End Feed	<b>A8</b> <b>CONNECTOR/WIRE IN</b> <b>BW</b> Bare Wire (Standard 24") <b>CON6</b> Connector 6" <b>CON24</b> Connector 24"  BW: Standard length is 24". Max length is 120". Request custom length by writing in part number next to BW (example: BW48)  <b>BW</b> Bare Wire (Standard 24") <b>CON6</b> Connector 6" <b>CON24</b> Connector 24"  BW: Standard length is 24". Max length is 120". Request custom length by writing in part number next to BW (example: BW48)	<b>A9</b> <b>CONNECTOR/WIRE OUT</b> <b>N/A</b> Closed End (No feed)  <b>BW</b> Bare Wire (Standard 24") <b>CON6</b> Connector 6" <b>CON24</b> Connector 24"  BW: Standard length is 24". Max length is 120". Request custom length by writing in part number next to BW (example: BW48)	
<b>A10</b> <b>END CAPS</b> <b>Single</b> <b>WH</b> White <b>Pass Through</b> <b>N/A</b> Not Applicable	<b>A11</b> <b>LENGTH (IN)</b>  Minimum length is 12", maximum length is 191" not including end caps. Contact us for lengths under 12". Available in 2" increments.	<b>A12</b> <b>EXACT/OPTIMAL</b> <b>O</b> Optimal Illumination <b>E</b> Exact Specified Length  Exact fixtures are the exact length specified +0 - 1/8". Optimal fixtures' length is rounded down with illumination end to end. See Exact/Optimal Fixture Length charts.		

5 year warranty | Warranty only valid with QTL power supplies | Up/Down & Helical Bend | Data subject to change, all data has +/- 5% tolerance | Ambient or mounting surface must not be lower than -4°F or higher than: 1.5HE - 125°F; 2.5HE - 115°F | Patent # D846,786 S, 10,619,828 B2 | Only FC fixtures are Field-Cuttable per installation instructions



# Q-CAP WURM™ FOR TUNABLE APPLICATIONS

## 24VDC Flexible Fixtures

### B. FIELD CUTTABLE Q-CAP

B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
PRODUCT	MOUNTING	RATED	CCT	WATTAGE	LENS	WIRE INPUT/OUTPUT	CONNECTOR/WIRE IN	CONNECTOR/WIRE OUT	END CAPS	LENGTH (IN)	EXACT/ OPTIMAL
WURM-FC-DW		DRY			ENC/CL	S1		N/A	WH	48"	N/A

Sample Part Number: WURM-DW-WSCS-DRY-24/30-1.5HE-ENC/CL-P1-BW-BW-N/A-48"-E

**B1**

**PRODUCT**

**WURM-FC-DW**  
LED engine is built with 3 wires requiring 0-10v, DMX or DALI control. Using DALI, DMX, or non QTL power supplies may double watts/ft. See last page for compatible power supplies.

**B2**

**MOUNTING**

**MCS** Magnetic Clip Small  
**WSCS** White Snug Clip Small  
**BN-UD-SST-16'** 16' BENDIT Up/Down Stainless Steel Channel  
**BN-UD-SST-32'** 32' BENDIT Up/Down Stainless Steel Channel  
**BN-UD-WH-16'** 16' BENDIT Up/Down White Stainless Channel  
**BN-UD-WH-32'** 32' BENDIT Up/Down White Stainless Channel

White snug clip only for indirect cove use, not intended for hanging fixtures upside down.

**B3**

**RATED**

**DRY** IP20

**B4**

**CCT**

**24/30** 2400K/3000K  
**27/40** 2700K/4000K

**B5**

**WATTAGE**

**1.5HE** 1.5WHE-SO  
**2.5HE** 2.5WHE-HO

SO: Standard Output  
HO: High Output

**B6**

**LENS**

**ENC/CL** Encapsulated in Clear  
For representation of LED visibility, see Diode Visibility section on following pages

**B7**

**WIRE INPUT/OUTPUT**

**S1** Single 1 (Input only) - End Feed

**B8**

**CONNECTOR/WIRE IN**

**BW** Bare Wire (Standard 24")  
**CON6** Connector 6"  
**CON24** Connector 24"

BW: Standard length is 24", Max length is 120". Request custom length by writing in part number next to BW (example: BW48)

**B9**

**CONNECTOR/WIRE OUT**

**N/A** Closed End (No feed)

**B10**

**END CAPS**

**WH** White

Due to cutting, white endcaps are not available.

**B11**

**LENGTH (IN)**

**48"** Nominal

Starting Run length is 48.38" for S1  
Each cut point subtracts from the Starting Run Length  
1.5HE & 2.5HE have a 2" cut point  
S1 can be cut down to as little as 2.38"

**B12**

**EXACT/OPTIMAL**

**N/A**

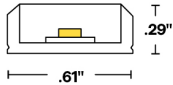
Single ▶



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24VDC Flexible Fixtures

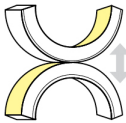
## 1 PRODUCT - DIMENSIONS



Profile  
(Standard)

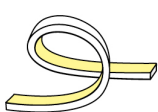
### BEND RADIUS

Up/Down Bend



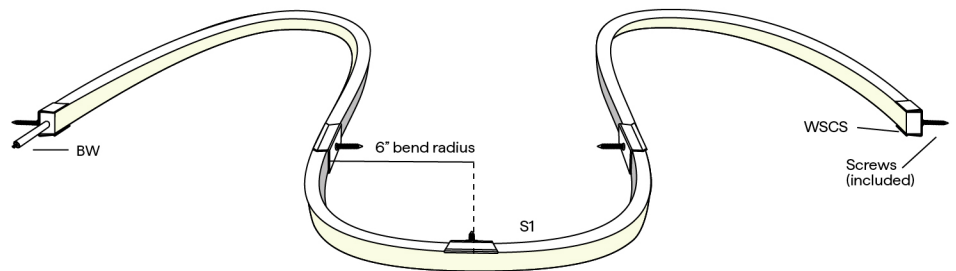
6" bending radius

Helical Bend



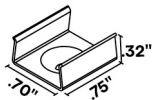
6" bending radius  
Max recommended rotation  
of 1 rotation per 16'

### FLEXIBILITY



## 2 MOUNTING

WSCS

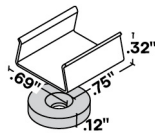


White Snug Clip Small  
Indirect uplight

To order separately use WSCS

Each clip comes with a #6x5/8" flat  
screw

MCS

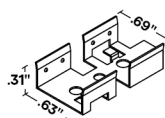


Magnetic Clip Small  
Cove use only

To order separately use MCS

each clip comes with a #6x1 1/4" screw

BN-UD



BENDIT Channel  
Vertical Stainless Steel  
Flexible Channel

Continuous mounting solution for  
flexible fixtures, 16' or 32' field  
cuttable lengths

To order separately use either  
STND-QCAP-BN-UD-S-SST-16',  
STND-QCAP-BN-UD-S-SST-32',  
STND-QCAP-BN-UD-S-WH-16', or  
STND-QCAP-BN-UD-S-WH-32'

64 #4-40 1/2" screws provided per  
16'



# Q-CAP WURM™ FOR TUNABLE APPLICATIONS

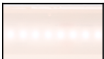
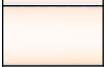
## 24VDC Flexible Fixtures

### 4 / 5 DELIVERED LUMENS

[Calculated L70 = 40000 hrs]  
Tested with WURM-DW-WSCS-DRY

CCT	1.5HE W/FT		2.5 HE W/FT	
	ENC/CL		ENC/CL	
	LM	CRI	LM	CRI
2400K	133	92	198	92
2700K	126	96	201	97
3000K	132	97	206	97
4000K	142	97	225	98

### 6 DIODE VISIBILITY

	ENC/CL - Clear encapsulation
	ENC/TL - Translucent encapsulation

## TEMPERATURE RATINGS

	DW 1.5 HE W/FT		DW 3.0 HE W/FT		DW 2.5 HE W/FT		DW 5.0 HE W/FT	
	QTL power supply other than DALI, DMX		DALI, DMX, or non-QTL power supply		QTL power supply other than DALI, DMX		DALI, DMX, or non-QTL power supply	
	Min	Max	Min	Max	Min	Max	Min	Max
Ambient Operating Temp - Surface	-4°F	140°F	-4°F	120°F	-4°F	120°F	-4°F	100°F
Storage Temp	-4°F	140°F	**	**	-4°F	140°F	**	**
Installation Temp	50°F	100°F	**	**	50°F	100°F	**	**

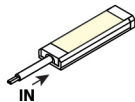
## BUG RATING

WATTAGE	B	U	G
6.0 (ALL CCTs), 3.0HE (ALL CCTs), 5.0HE (ALL CCTs)	B0	U1	G0

### 7 WIRE INPUT/OUTPUT

SINGLE (Input only)

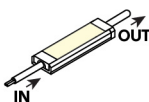
S1



End Feed

PASS THROUGH (Input/Output) - Only applicable for Non-Field Cuttable Q-CAP

P1



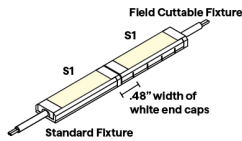
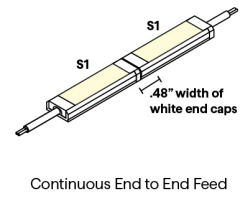
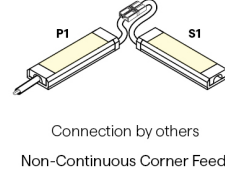
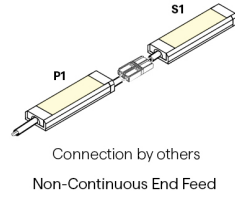
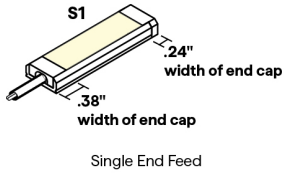
End Feed



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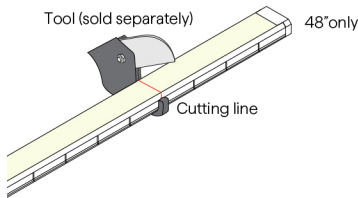
24VDC Flexible Fixtures

## CONFIGURATION OPTIONS

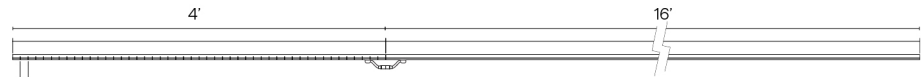


Field Cuttable - Continuous End to End Feed

## FIELD CUTTABLE MARKING



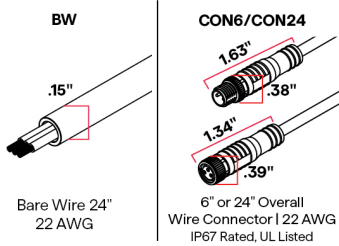
Field cuttable fixtures are sold in 4' increments and go at the end of a run, allowing for easy field adjustment



**Note:** Only FC fixtures are field cuttable — Do not attempt to cut non FC fixtures. Cut only on the marked cut lines. Only cut from non-feed end. Do not attempt to cut while power is on.

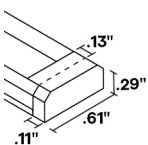
## 8 / 9 CONNECTOR/WIRE - IN/OUT

Connector/Wire In or Out not needed to specify product. Typical selection is S1 for Wire Input/Output, BW for Connector/Wire In, N/A for Connector/Wire Out, and WH for End Caps



## 10 END CAPS (NO FEED)

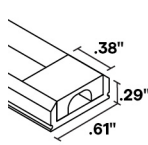
WH (only used in A. Non-Field Cuttable Q-CAP)



White endcaps .11" added at end .24" dim spot

## END CAPS (WITH FEED)

End Feed S1, P1



White endcaps .0" added at end .38" dim spot

## 11 LENGTH - WIRING DETAIL



# Q-CAP WURM™ FOR TUNABLE APPLICATIONS

## 24VDC Flexible Fixtures

Available in 2" increments 12"-191"

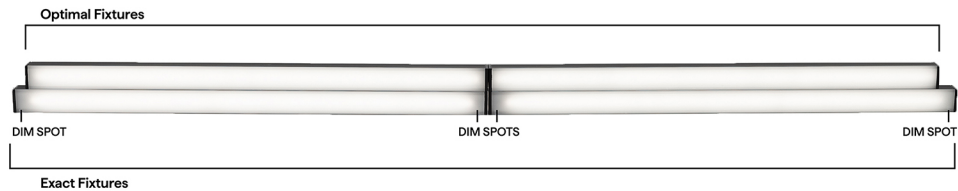


### 12 EXACT/OPTIMAL FIXTURE LENGTH

[E/O Length Calculator →](#)

[E/O Explained →](#)

Exact fixtures are the exact length specified. Optimal fixtures' length is rounded down based on LED cut points to allow the fixture to be illuminated end to end. For runs with multiple fixtures that need to fill a specific length, it's recommended to order all optimal fixtures with an exact fixture at the end of the run.



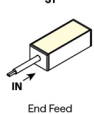
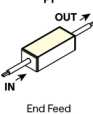
### DW LENGTHS BY INCH

Available in any length in between 12" and 191", chart below shows example lengths. Exact fixtures are the length specified. Optimal fixtures' length is rounded down with illumination end to end. All fixtures' tolerance is +0 - 1/8". Consult factory for lengths under 12".

#### EXACT LENGTH

Requested Length	Potential dim spot on either end of fixture
12"	1"
13"	.5"
14"	1"
15"	.5"
16"	1"
17"	.5"
18"	1"
19"	.5"
20"	1"
21"	.5"
22"	1"
23"	.5"
24"	1"
36"	1"
48"	1"
60"	1"
72"	1"
84"	1"
96"	1"

#### OPTIMAL LENGTH: highlighted rows are closest to requested nominal length

Requested Nominal Length	S1	P1
	 End Feed	 End Feed
12"	10.63"	10.75"
13"	12.63"	12.75"
14"	12.63"	12.75"
15"	14.63"	14.75"
16"	14.63"	14.75"
17"	16.63"	16.75"
18"	16.63"	16.75"
19"	18.63"	18.75"
20"	18.63"	18.75"
21"	20.63"	20.75"
22"	20.63"	20.75"
23"	22.63"	22.75"
24"	22.63"	22.75"
36"	34.63"	34.75"
48"	46.63"	46.75"
60"	58.63"	58.75"
72"	70.63"	70.75"
84"	82.63"	82.75"
96"	94.63"	94.75"



# Q-CAP WURM™ FOR TUNABLE APPLICATIONS

## 24VDC Flexible Fixtures

### COMPATIBLE POWER SUPPLIES


See power supplies cut sheets for more information. Data subject to change, all data has +/- 5% tolerance.

DIM TO LEVEL	INDOOR	OUTDOOR
	DW-HE Tunable Applications	DW-HE Tunable Applications
0.1%	QT-CAB-eLED+DALI-DT6 QT-CAB-eLED+DALI-DT8 QT-CAB-eLED+DALI-DT8-AWN QT-CAB-eLED+TW QT-CAB-eLED+TW-AWN QTM-eLED+DALI-DT6 QTM-eLED+DALI-DT8 QTM-eLED+DALI-DT8-AWN QTM-eLED+TW QTM-eLED+TW-AWN QZ-DMX	Q-SET-QZ-DMX QOM-eLED+DALI-DT6 QOM-eLED+DALI-DT8 QOM-eLED+PS-DALI-DT6 QOM-eLED+PS-DALI-DT8 QOM-eLED+TW QZ-DMX
1%	QZ-DALI-DT8	Q-SET+QZ-DALI-DT8 QZ-DALI-DT8
10%	Non-Dim Power Supply with TW App Dongle	

DIMMING PROTOCOL	INDOOR	OUTDOOR
	DW-HE Tunable Applications	DW-HE Tunable Applications
0-10V	QT-CAB-eLED+TW QT-CAB-eLED+TW-AWN QTM-eLED+TW QTM-eLED+TW-AWN	QOM-eLED+TW
Lutron Athena	QT-CAB-eLED+DALI-DT8-AWN QT-CAB-eLED+TW-AWN QTM-eLED+DALI-DT8-AWN QTM-eLED+TW-AWN	
DMX LED wattage must be doubled for DW-HE products	QZ-DMX	Q-SET-QZ-DMX QZ-DMX
DALI-2: DT6 LED wattage must be doubled for DW-HE products except for AWN	QT-CAB-eLED+DALI-DT6 QTM-eLED+DALI-DT6	QOM-eLED+DALI-DT6
DALI-2: DT8 LED wattage must be doubled for DW-HE products except for AWN	QT-CAB-eLED+DALI-DT8 QT-CAB-eLED+DALI-DT8-AWN QTM-eLED+DALI-DT8 QTM-eLED+DALI-DT8-AWN QZ-DALI-DT8	Q-SET+QZ-DALI-DT8 QOM-eLED+DALI-DT8 QZ-DALI-DT8
SCENE App Dimmed	Non-Dim Power Supply with TW App Dongle	


### COMPATIBLE MOUNTING ACCESSORIES

NJ-MEDIUM




J Mounting Bracket

SD-L-MEDIUM



L Mounting Bracket

IQ-QCAP-UNV-CUTTER



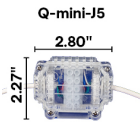
QTL recommended FC Cutter



# Q-CAP WURM™ FOR TUNABLE APPLICATIONS

24VDC Flexible Fixtures

## COMPATIBLE WIRING ACCESSORIES



UL Listed, miniature  
junction box, DRY/DMP  
(WET rated with silicone)

## COMPATIBLE CONTROL ACCESSORIES

### SCENE APP DONGLE



Wi-Fi or Bluetooth  
Connectivity

## COMPATIBLE APPS

### NFC APP



Read and write  
DMX addresses and  
adjust voltage