Flex Tube Pixel G2™

Acclaim™

PROJECT		FIRM		ORDER #		TYPE		QTY

Flex Tube Pixel G2™ is a low profile, exterior-rated linear LED RGB/RGBW strip that features individual control of every 3.28" (83.34mm) section plus a fully homogenized 'dotless' direct view appearance. The highly durable silicone body is fully rated to IP68 for wet location use; IK08 for impact resistance and 3G (ANSI C136.31) for high vibration and bridge applications.

Several RGB or RGBW emitter choices are available, together with two bend-direction options. Matching aluminum channels perfectly compliment Flex Tube Pixel G2 for surface mount, recessed and flexible installations. Various SPI driver options are available to allow control via DMX or Art-Net - see pages 3 and 4.

At a glance

👁 Optics

120°

🖌 Emitters

RGB or **QS** RGBW (W=3000K) or **QW4** RGBW (W=4000K)

🔌 Power
Low voltage:
24VDC
via driver

🔌 Consumption
6.7W per foot
22W per meter

🌡 Temperature
-40° F to **131° F**
-40° C to **55° C**

🎛 Output
Up to
287 lumens
per linear foot

🌦 Protection
Ingress: **IP68**
Impact: **IK08**
Vibration: **3G**

Configure your product

F2 **-22** **-X*nn*A** **N**

Example final code: **F2Y-225-AARN**

Bending:
Y = Horizontal
Z = Vertical

See page 8 for details

Feed entry:
2 = Side feed right
4 = Side feed left
5 = Rear feed
6 = End feed

Length:
A = 16.4' (5m)
X = Custom - please see below

Emitters:
S = RGB
Q = QS (Quad RGBW, W=3000K)
R = QW4 (Quad RGBW, W=4000K)

For any length other than a full 16.4' 5m spool, please specify the required length by quoting the number of 3.28" (83.34mm) sections as a two-figure number between 02 and 60 (equating to lengths between 6.56" (166.6mm) and 16.4' (5m)). The number should immediately follow the 'X'. For example, for a 4m length (with horizontal bend, rear feed and QW4 emitters) the order code would be:
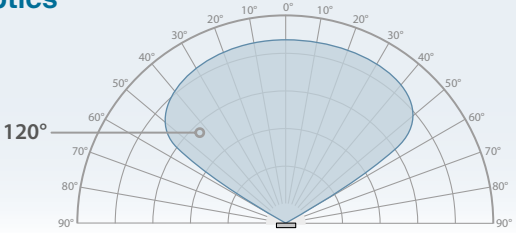
F2Y-225-X*48*ARN

PROJECT	FIRM	ORDER #	TYPE	QTY

Specifications

Emitters	RGB, QS (Quad RGBW, W=3000K) or QW4 (Quad RGBW, W=4000K)
Optics	120°
Output	Up to 287 lumens per foot
Lumen maintenance	L$_{70}$ 50,000 hours (@ 25° C)
Segments/pixels	Pixel distance of 3.28" (83.34mm), 60 RGB or RGBW sections per 16.4' (5m)
Control	0-100% dimming via DMX, 3 or 4 channels per 3.28" pixel, 180 or 240 channels per 16.4' (5m)
Operating voltage	24VDC
Power consumption	6.7W per foot (22W per meter)
Connection	16.4' (5m) injection molded feed cable with bare tails
Fixture lengths	Built to order lengths up to 16.4' (5m)
Minimum bends	Separate model options with vertical or horizontal bend. Minimum bend radius: 5.9" (150mm)
Mounting	Press-fit aluminum channels in various lengths: 0.78" (20mm), 3.28' (1m) or 6.5' (2m)
Material	UV resistant silicone
Finish	White
Ambient temperature range	-40° F to 131° F (-40° C to 55° C)
Ingress protection	IP68, wet location, submersible* to 6.56' (2m)
Impact protection	IK08, protection against 5 joule impact (30cm distance)
Vibration protection	ANSI C136.31, 3G-rated for high vibration and bridge applications
Warranty	5 years, limited
Weight	3.57 lbs (1.62 kg) for 5m spool
Dimensions	See page 9
Certifications	c(UL)us CE (RCM) 3G LUMINAIRE VIBRATION * UL approval limits submersible installation to non-human occupied and freshwater locations only. All cables must be landed in environmentally suitable junction boxes.

Photometrics (estimated)

For all available IES files, please visit acclaimlighting.com/flex-tube-pixel-g2

Emitter style (bend type)	Lumens (/ft) (all emitters on)	Max Candela	CRI (white emitters)	TM30 (white emitters)
QS RGBW (horizontal bend)	206	65.5	82.1	83.5
QS RGBW (vertical bend)	255	81.8	82	83.3
QW4 RGBW (horizontal bend)	234	75.2	83.8	83.7
QW4 RGBW (vertical bend)	287	93.2	83.9	83.9

Control options

There are numerous control options for Flex Tube Pixel G2 strips, offering flexible and expandable solutions for small, medium and large scale installations.
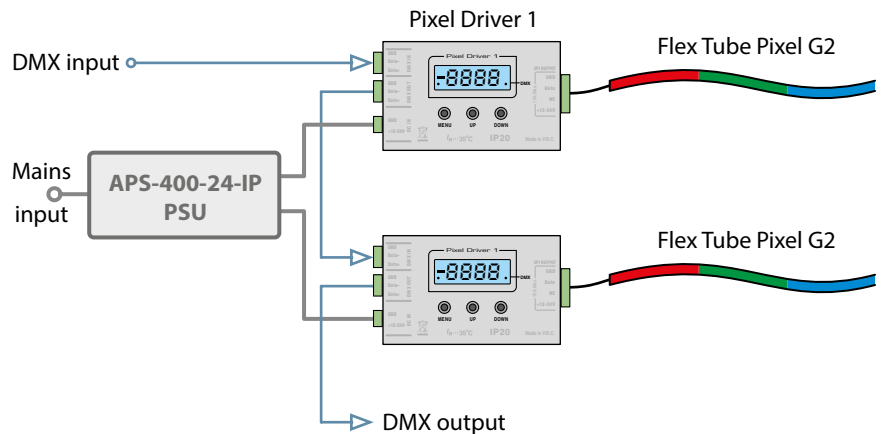
Solution 1: Pixel Driver 1 control

This solution best suits the control of small numbers of Flex Tube Pixel G2 spools, but is potentially expandable to larger quantities.

Each Pixel Driver 1 controls a single spool of Flex Tube Pixel G2. The signal input is via DMX, with each 16.4' (5m) spool requiring the following number of channels:

- Flex Tube Pixel G2 **RGB**   180 DMX channels
- Flex Tube Pixel G2 **RGBW**   240 DMX channels

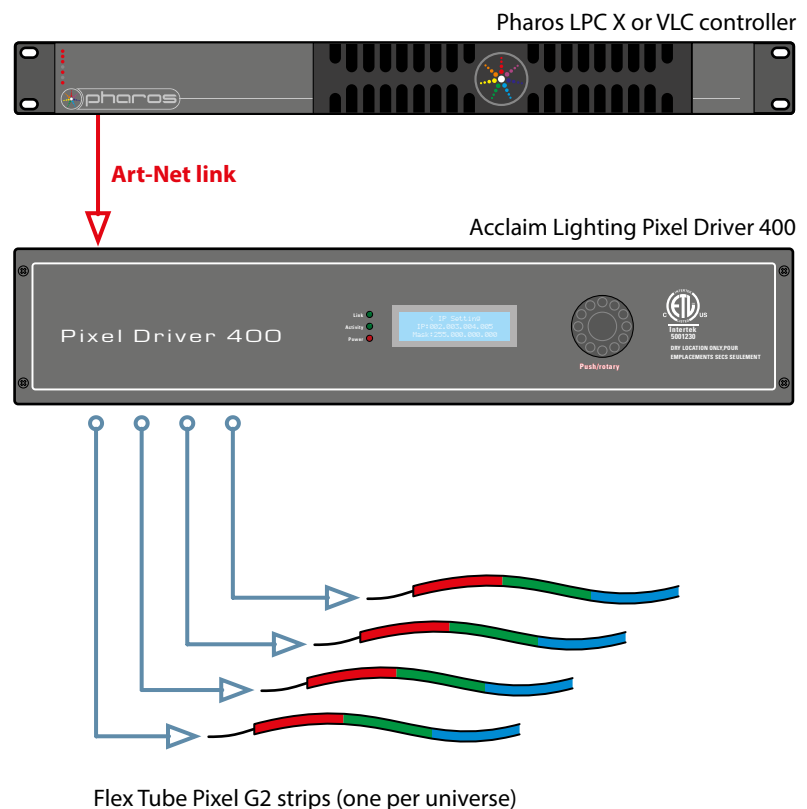It is therefore possible to fully control two spools from a single DMX universe.

Up to three spools can be powered from a single APS-400-24-IP PSU.

Pixel Driver 1

DMX input

Flex Tube Pixel G2

Mains input

APS-400-24-IP PSU

Flex Tube Pixel G2

DMX output

Solution 2: Pharos LPC X or VLC *plus* Pixel Driver 400

The combination of a Pharos™ controller and multiple Acclaim Pixel Driver 400 units provides a suitable solution for medium size installations.

Each Pixel Driver 400 can control either two full 16.4' (5m) spools or up to four 13.7' (4.2m) lengths of Flex Tube Pixel G2. Alternatively, a greater number of short lengths can be driven. The signal link from the Pharos controller to the Pixel Driver 400 is via Art-Net, with each spool being assigned a separate universe.

Pharos LPC X or VLC controller

Art-Net link

Acclaim Lighting Pixel Driver 400

Pixel Driver 400

Flex Tube Pixel G2 strips (one per universe)
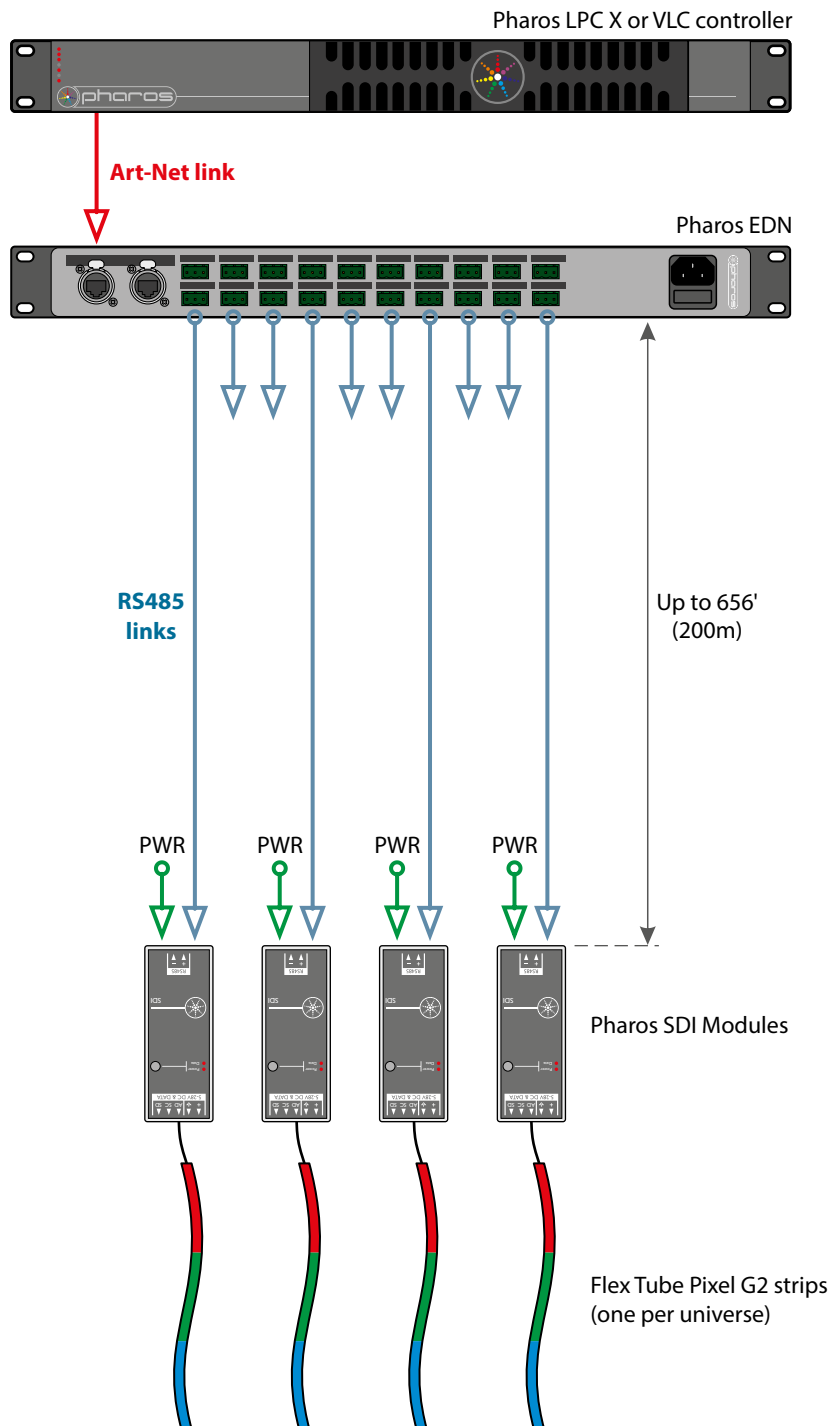
Solution 3: *See next page*

Control options *(continued)*

Solution 3: **Pharos LPC X or VLC** *plus*
Pharos EDN *plus*
Pharos SDI

For larger deployments of Flex Tube Pixel G2 strips, a scalable modular solution involves the use of multiple Pharos™ components.

Art-Net signals from an LPC X or VLC controller are fed to one or more EDN nodes, each of which has either 10 or 20 outputs. An SDI module can be attached to each output, at a distance of up to 656' (200m). A universe is assigned to each SDI module. At each SDI module, a Flex Tube Pixel G2 spool is attached, together with a local 24VDC power feed.

The number of EDN nodes, SDI modules and Flex Tube Pixel G2 spools can be scaled up to match the needs of large installations.

Pharos LPC X or VLC controller

Art-Net link

Pharos EDN

RS485 links

Up to 656' (200m)

PWR   PWR   PWR   PWR

Pharos SDI Modules

Flex Tube Pixel G2 strips (one per universe)
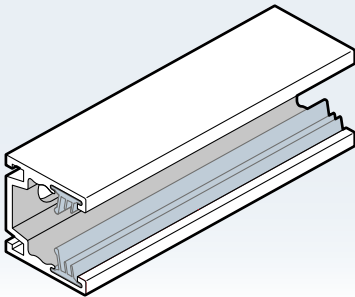
PROJECT | FIRM | ORDER # | TYPE | QTY

Related components *(channel dimensions on page 10)*

Rigid channel

A rigid aluminum channel for straight Flex Tube runs. Available in 0.78" (20mm), 3.28' (1m) and 6.56' (2m) lengths. Supplied with between 1 and 10 screws, depending on the chosen length.

0.78" (20mm) **F2CH20**
3.28' (1m)... **F2CH1000**
6.56' (2m) **F2CH2000**

Rigid flanged channel

A rigid aluminum channel for straight Flex Tube runs, featuring a flanged edge for recessed applications. Available in 0.78" (20mm), 3.28' (1m) and 6.56' (2m) lengths. Supplied with between 1 and 10 screws, depending on the chosen length.
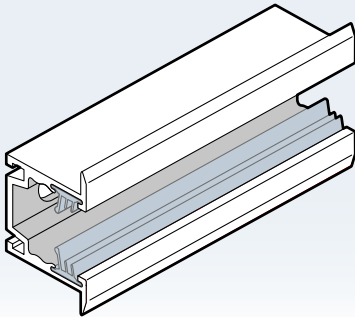
0.78" (20mm) **F2RCH20**
3.28' (1m)... **F2RCH1000**
6.56' (2m) **F2RCH2000**

Flexible channel for horizontal bends

An aluminum channel with one sectioned side wall to allow bends to be formed in the horizontal axis. Available in 1.64' (500mm) and 3.28' (1m) lengths. Supplied with 2 or 5 screws, depending on the chosen length.
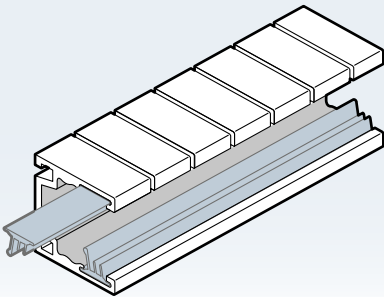
For horizontal bend versions
1.64' (500mm)... **F2FCH500**
3.28' (1m)... **F2FCH1000**
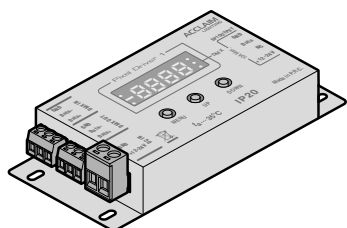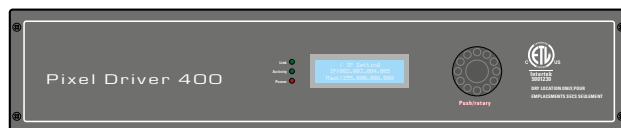
SCAN FOR PRODUCT PAGE

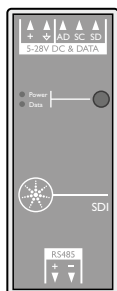# Flex Tube Pixel G2™

Related components

Drivers and nodes

Pixel Driver 1
1x 5m spool max
DMX input
24VDC power input (use in conjunction with ALPS-series 24VDC power supplies)
Part # **PIX001**

Pharos SDI module
1x 5m spool maximum
RS485 input from EDN node
24VDC power input (use in conjunction with ALPS-series 24VDC power supplies)
Part # **SDI**

Pixel Driver 400
2x 5m spools or 4x 4.2m lengths maximum
400W 24VDC; 8 SPI output ports
Art-Net input; 100-277VAC 50/60Hz
Part # **PIX400**

Pharos EDN 10 or 20 nodes
10 or 20 output ports (DMX or RS485)
Art-Net input; 100-277VAC 50/60Hz
Part # **EDN 10** or **EDN 20**

Controllers

VLC (for single zones)
Video control for a single array / screen
25,600 to 768,000 control channels
HD video via local media files or DVI-D input
Part # **VLC #***

LPC X (for multiple zones)
Flexible, multi-location lighting control
5,120 to 51,200 control channels
Program and pixel map via PC or Mac
Part # **LPC X #***

Trigger panels

* please consult spec sheets for further ordering options.
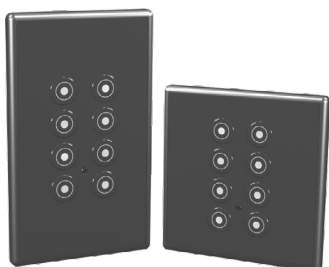
BPS
8 button wall station for Pharos units
LED indicator on each button; POE power; IR remote compatible. Multiple faceplate color options
Part # **BPS #***

TPS
Customizable wall mount touch screen
POE power, IR remote compatible.
Configure using Pharos Designer software.
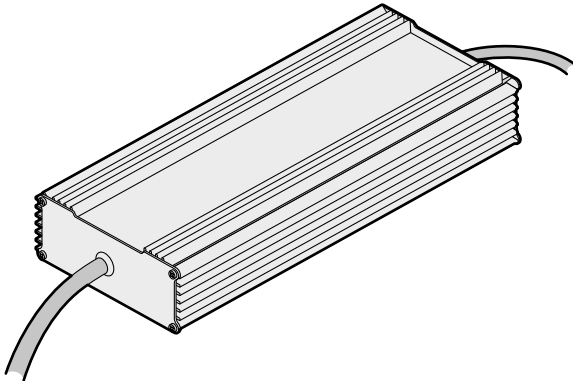Multiple faceplate color options
Part # **TPS #***

Related components

Power supplies (wet and dry locations)
(for use with Pixel Driver 1 and SDI modules)

ALPS-200-24
200W 24VDC
1x 5m spool maximum
IP66 ingress protection
100-277VAC 50/60Hz

Part #   **ALPS-200-24**

ALPS-400-24
400W 24VDC
3x 5m spools maximum
IP66 ingress protection
100-277VAC 50/60Hz

Part #   **ALPS-400-24**

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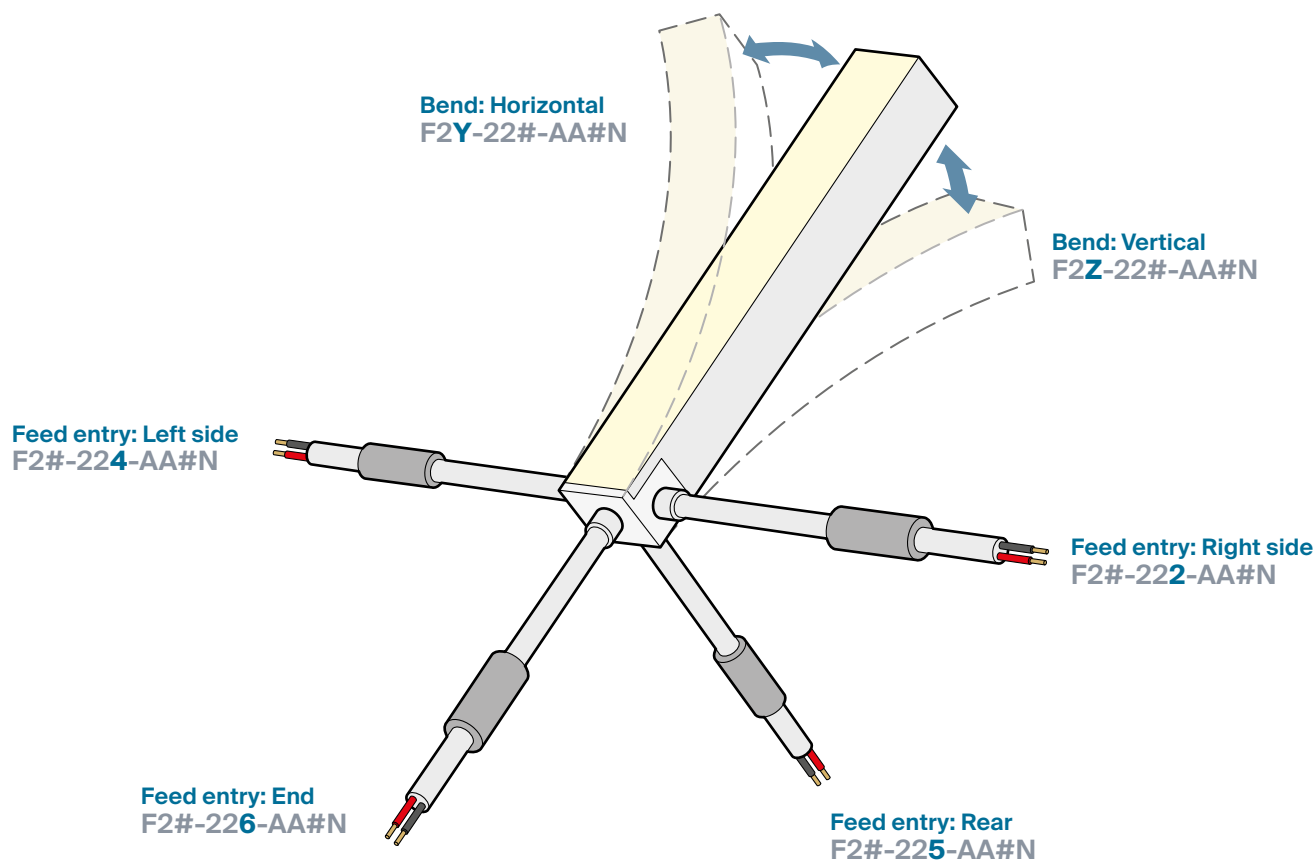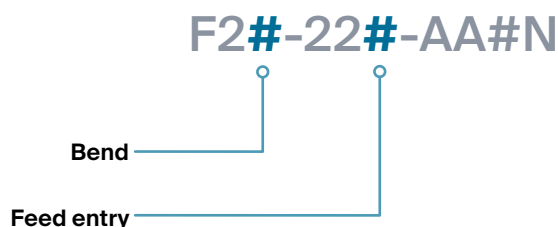
Bends and feed entries

Flex Tube Pixel G2 strips are available with two bend options and four choices of power feed entries, which can be mixed in any combination to suit your installation.

F2**#**-22**#**-AA#N

Bend ————○

Feed entry ————○

The bend and feed entry options affect the order code as follows:

Bend: Horizontal
F2**Y**-22#-AA#N

Bend: Vertical
F2**Z**-22#-AA#N

Feed entry: Left side
F2#-22**4**-AA#N

Feed entry: Right side
F2#-22**2**-AA#N

Feed entry: End
F2#-22**6**-AA#N

Feed entry: Rear
F2#-22**5**-AA#N

Link cable guidelines
Connection cable extensions used to link Flex Tubes to a driver unit must not exceed 32 feet (10m) due to the restrictions of the SPI signal specifications. We recommend 14 AWG 3-core cable (maximum current for a 16.4' (5m) spool is 5A @ 24VDC.
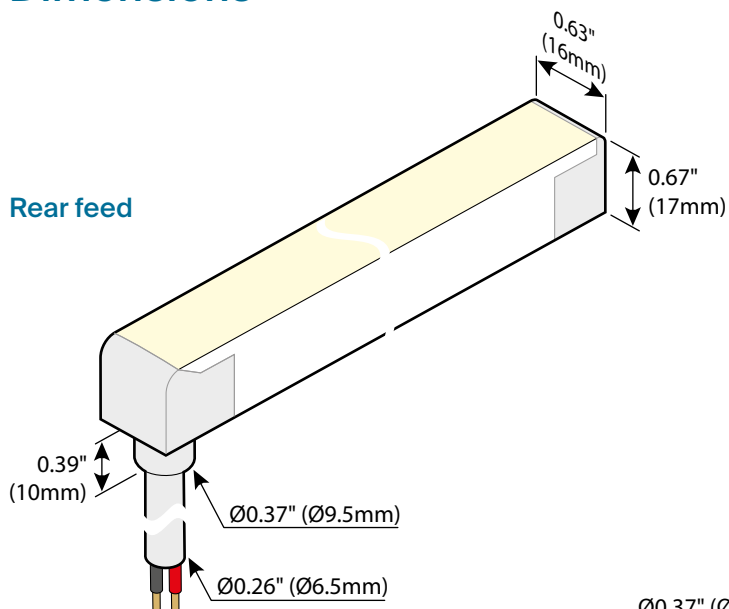
SCAN FOR PRODUCT PAGE

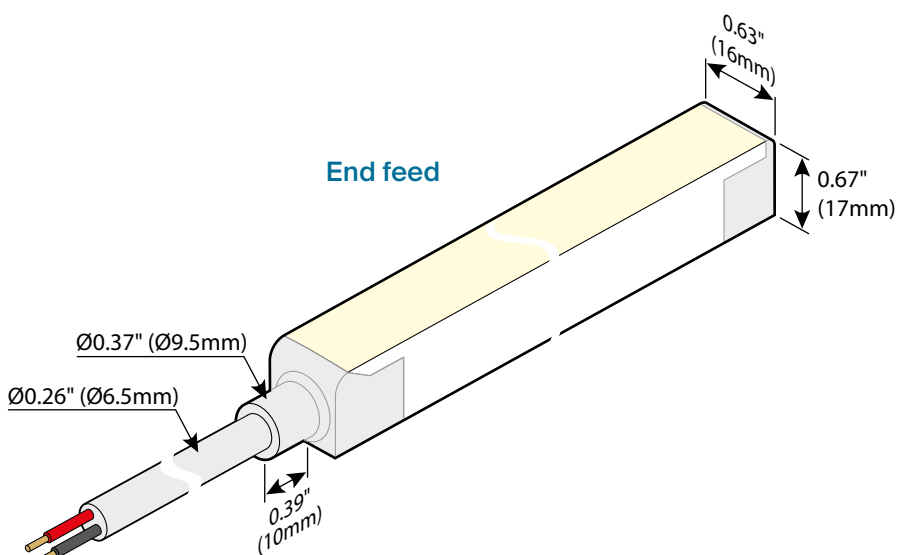## Dimensions

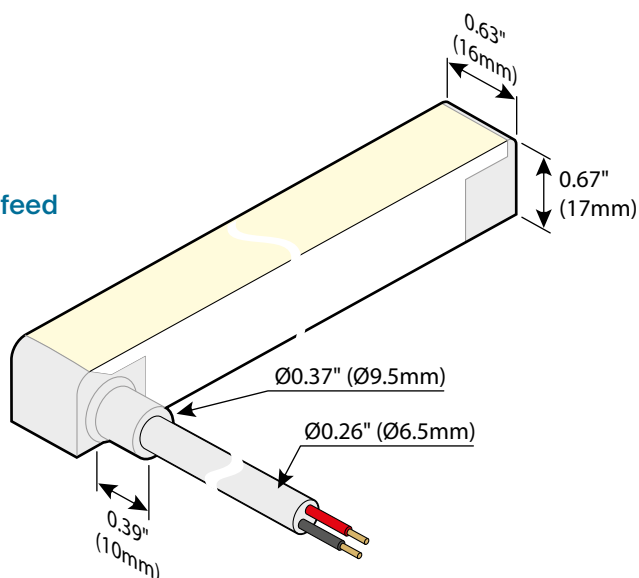**Rear feed**

0.63"
(16mm)

0.67"
(17mm)

0.39"
(10mm)

Ø0.37" (Ø9.5mm)

Ø0.26" (Ø6.5mm)

End feed

0.63"
(16mm)

0.67"
(17mm)

Ø0.37" (Ø9.5mm)

Ø0.26" (Ø6.5mm)

0.39"
(10mm)

Side feed

0.63"
(16mm)

0.67"
(17mm)

Ø0.37" (Ø9.5mm)

Ø0.26" (Ø6.5mm)

0.39"
(10mm)

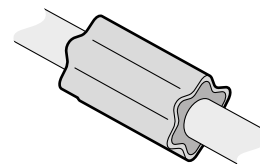*Note: Each feed cable has a metal-encased joint roughly 5" (130mm) from the inlet, which must not be removed.*

Max Ø0.59" (15mm)

SCAN FOR PRODUCT PAGE
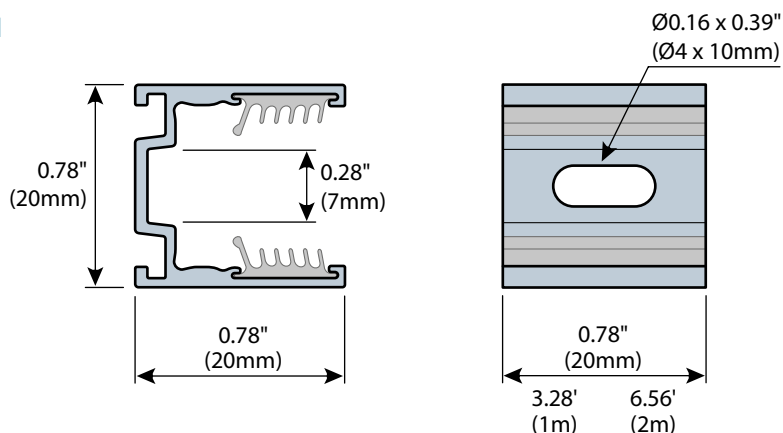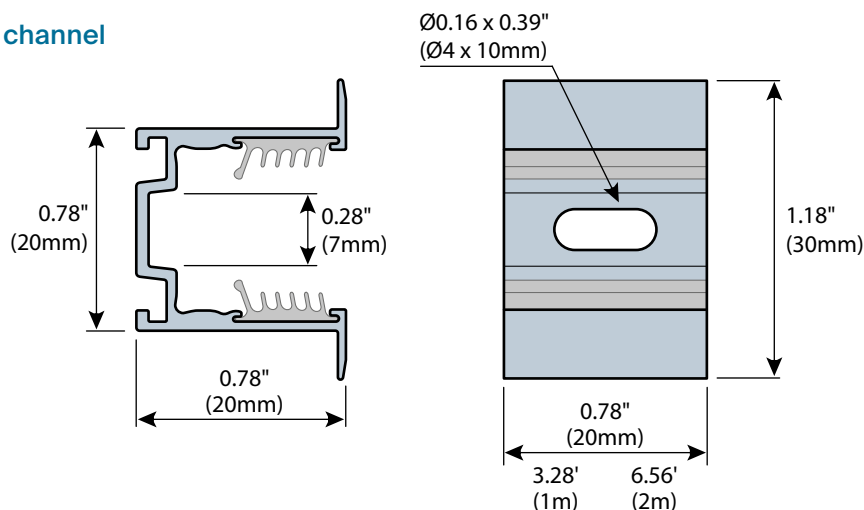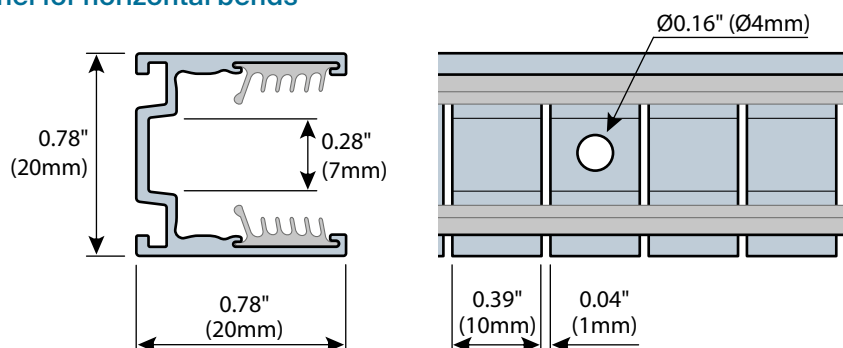
Dimensions

Rigid channel

Ø0.16 x 0.39"
(Ø4 x 10mm)

0.78"
(20mm)

0.28"
(7mm)

0.78"
(20mm)

0.78"
(20mm)

3.28'
(1m)

6.56'
(2m)

Rigid flanged channel

Ø0.16 x 0.39"
(Ø4 x 10mm)

0.78"
(20mm)

0.28"
(7mm)

1.18"
(30mm)

0.78"
(20mm)

0.78"
(20mm)

3.28'
(1m)

6.56'
(2m)

Flexible channel for horizontal bends

Ø0.16" (Ø4mm)

0.78"
(20mm)

0.28"
(7mm)

0.78"
(20mm)

0.39"
(10mm)

0.04"
(1mm)

For full installation details, please refer to the **user guide**, available for free download here: