WLS28-2

Versatile LED Strip Lights

- Compact design with countless options for intensity control, colors, connections, windows, lengths and motion detection
- Single-, dual-, or multicolored models for custom illumination, indication and more
- Ideal for use in indoor, outdoor, machine, assembly, washdown and other environments

BANNER ®

Versatile, All-Purpose LED Strip Lights

Integral High/Low/Off switch; also available as standalone accessory

Integral Motion Detection; also available as standalone accessory

Cascade models for connecting multiple lights end-to-end, minimizing wiring

Compact, space-saving design available in eight lengths from 145 to 1130 mm

Optional switch for local intensity or color control

IP69K sealed model options available

Lensed models or choice of clear or diffuse window

Banner's Complete
Lineup of Industrial LED Lighting

Robust, vibration-resistant housings and sleek designs make Banner Engineering's LED lighting ideal for a wide range of industrial applications, including machine lighting, enclosure lighting, visual inspection illumination and work cell lighting.
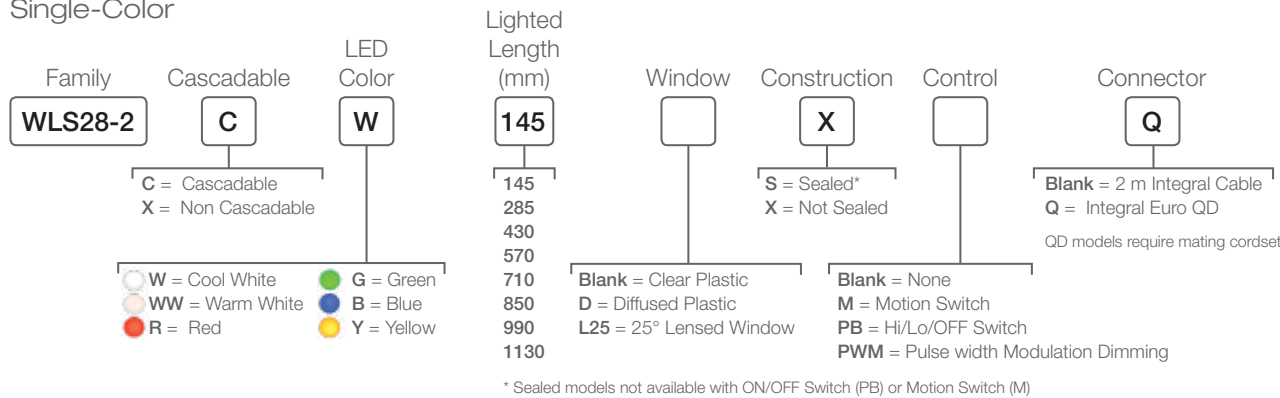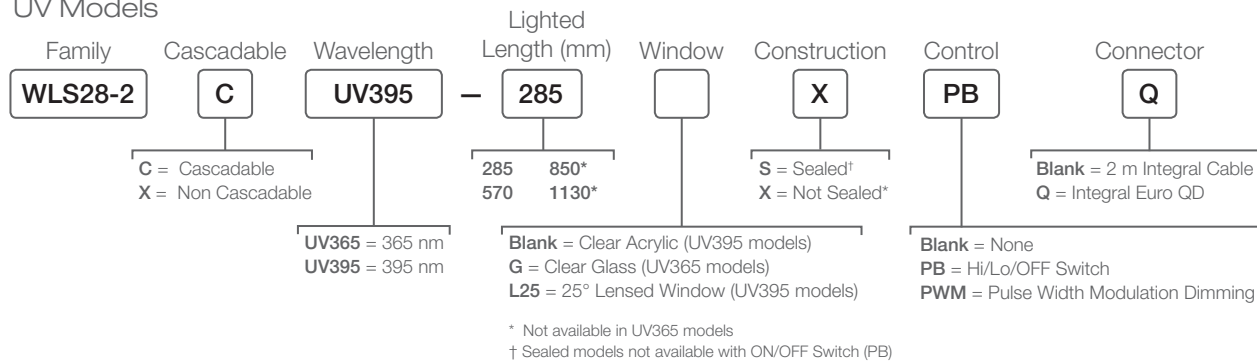
Single-Color

- Options for intensity control, colors, connections, windows, lengths and motion detection give full solution flexibility
- Low overall power consumption plus intensity control reduce energy expenses
- Bracket and snap clip options simplify installation and allow fast repositioning
- UV 365 nm and 395 nm wavelength models available for UV fluorescent and non-fluorescent applications
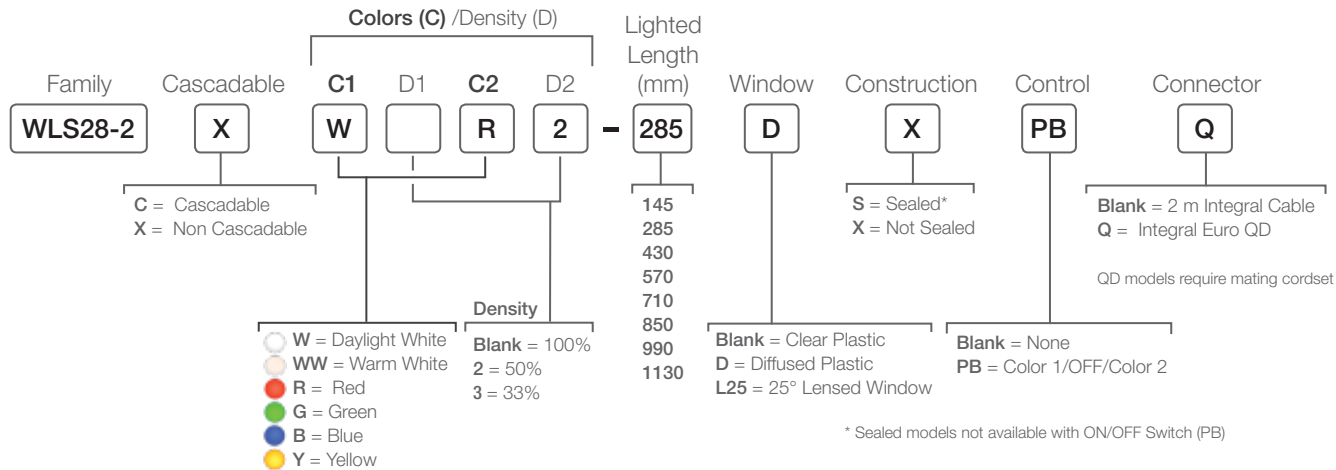
Single-Color

Family	Cascadable	LED Color	Lighted Length (mm)	Window	Construction	Control	Connector
WLS28-2	C	W	145		X		Q

C = Cascadable
X = Non Cascadable

● **W** = Cool White   ● **G** = Green
● **WW** = Warm White   ● **B** = Blue
● **R** = Red   ● **Y** = Yellow

145
285
430
570
710
850
990
1130

Blank = Clear Plastic
D = Diffused Plastic
L25 = 25° Lensed Window

S = Sealed*
X = Not Sealed

Blank = None
M = Motion Switch
PB = Hi/Lo/OFF Switch
PWM = Pulse width Modulation Dimming

Blank = 2 m Integral Cable
Q = Integral Euro QD

QD models require mating cordset

* Sealed models not available with ON/OFF Switch (PB) or Motion Switch (M)

UV Models

Family	Cascadable	Wavelength	Lighted Length (mm)	Window	Construction	Control	Connector
WLS28-2	C	UV395	— 285		X	PB	Q

C = Cascadable
X = Non Cascadable

UV365 = 365 nm
UV395 = 395 nm

285   850*
570   1130*

Blank = Clear Acrylic (UV395 models)
G = Clear Glass (UV365 models)
L25 = 25° Lensed Window (UV395 models)

S = Sealed†
X = Not Sealed*

Blank = None
PB = Hi/Lo/OFF Switch
PWM = Pulse Width Modulation Dimming

Blank = 2 m Integral Cable
Q = Integral Euro QD

* Not available in UV365 models
† Sealed models not available with ON/OFF Switch (PB)

Length (mm)	Lumens (Typical @ 25 °C)						Typical Wattage* (Watts)
	Cool White	Warm White	Green	Red	Yellow	Blue	
145	325	325	180	55	50	40	4
285	650	650	360	110	100	80	7
430	975	975	540	165	150	120	11
570	1300	1300	720	220	200	160	15
710	1625	1625	900	275	250	200	19
850	1950	1950	1080	330	300	240	22
990	2275	2275	1260	385	350	280	26
1130	2600	2600	1440	440	400	320	30

*Typical operating wattage is measured at 24 V dc

Dual-Color

- Dual color models expand solution capabilities within the same compact housing and no additional wiring or controls required
- Direct or remote color control options allow for manual or automatic control
- Intensity can be customized for each color to provide application flexibility and maintain simple installation
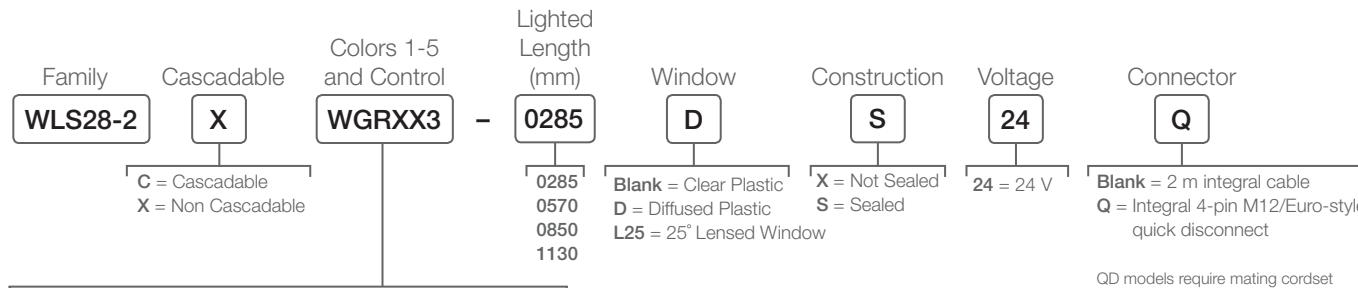
Colors (C) /Density (D)

Family	Cascadable	**C1**	D1	**C2**	D2	Lighted Length (mm)	Window	Construction	Control	Connector
WLS28-2	**X**	**W**		**R**	**2**	**285**	**D**	**X**	**PB**	**Q**

C = Cascadable
X = Non Cascadable

Lighted Length (mm):
145
285
430
570
710
850
990
1130

S = Sealed*
X = Not Sealed

Blank = 2 m Integral Cable
Q = Integral Euro QD

QD models require mating cordset

Density
Blank = 100%
2 = 50%
3 = 33%

- **W** = Daylight White
- **WW** = Warm White
- **R** = Red
- **G** = Green
- **B** = Blue
- **Y** = Yellow

Blank = Clear Plastic
D = Diffused Plastic
L25 = 25° Lensed Window

Blank = None
PB = Color 1/OFF/Color 2

* Sealed models not available with ON/OFF Switch (PB)

Length (mm)	Lumens* (Typical @ 25 °C)					Typical Wattage** (Watts)
	Daylight White	Red	Green	Blue	Yellow	
145	237	100	150	55	75	3.6
285	475	200	300	110	150	7.2
430	713	300	450	165	225	10.8
570	950	400	600	220	300	14.6
710	1188	500	750	275	375	18.2
850	1425	600	900	330	450	22.1
990	1663	700	1050	385	525	25.7
1130	1900	800	1200	440	600	29.8

*Lumen values lowered by 25% on diffused window models
**Typical operating wattage is measured at 24 V dc
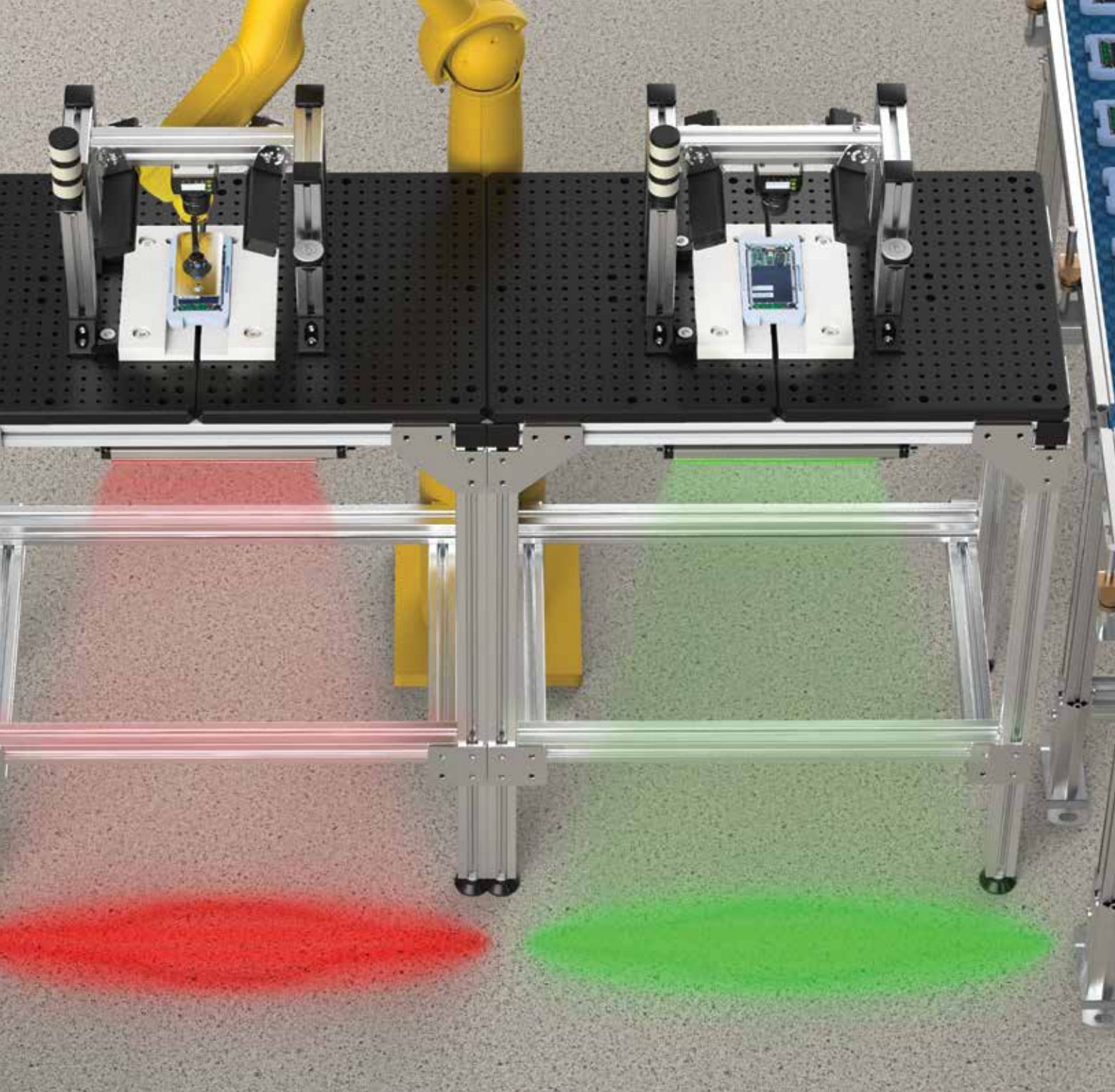
Multicolor with EZ-STATUS™

- Three and five color models cover all standard indication states with only four wires to connect
- Combine illumination and multiple indication capabilities in a single device to simplify installation and improve ergonomics
- EZ-STATUS™ promotes faster response to status changes and reduces the risk of costly mistakes and accidents

Family	Cascadable	Colors 1-5 and Control	Lighted Length (mm)	Window	Construction	Voltage	Connector
WLS28-2	X	WGRXX3	– 0285	D	S	24	Q

Cascadable
C = Cascadable
X = Non Cascadable

Lighted Length (mm)
0285
0570
0850
1130

Window
Blank = Clear Plastic
D = Diffused Plastic
L25 = 25° Lensed Window

Construction
X = Not Sealed
S = Sealed

Voltage
24 = 24 V

Connector
Blank = 2 m integral cable
Q = Integral 4-pin M12/Euro-style quick disconnect

QD models require mating cordset

Colors 1-5 and Control
WGRXX3 = White, Green, and Red with override control
WYRXX3 = White, Yellow, and Red with override control
GYRXX3 = Green, Yellow, and Red with override control
WGRYB5 = White, Green, Red, Yellow, and Blue with binary control
WGRXX6 = White, Green, and Red with I/O Block control
WYRXX6 = White, Yellow, and Red with I/O Block control
GYRXX6 = Green, Yellow, and Red with I/O Block control

Length (mm)	Lumens (Typical @ 25 °C)					Typical Wattage* (Watts)
	Daylight White	Green	Red	Yellow	Blue	
285	650	400	185	570	125	7
570	1300	800	370	1140	250	15
850	1950	1200	555	1710	375	22
1130	2600	1600	740	2280	500	30

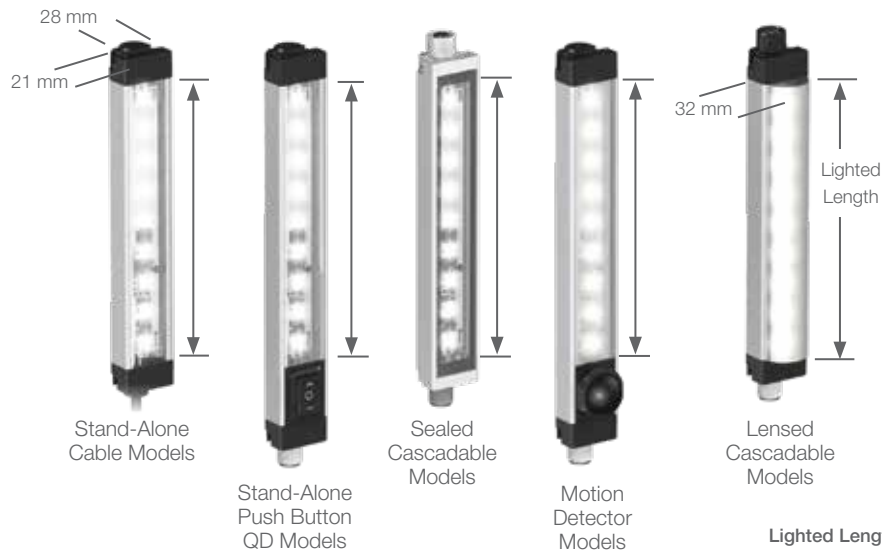*Typical operating wattage is measured at 24 V dc

Challenge

- Collaborative robots and operators must improve the production speed at an assembly cell
- Robots and operators need clear, non-verbal communication that doesn't obstruct the work area or interfere with the inspection system

Solutions

- WLS28 EZ-STATUS™ models with the L25 lens option illuminate the floor area to guide operators to the correct assembly step
- A single light can display three or five colors, expanding signaling opportunities beyond simple ON/OFF logic
- The bright light from a slim housing doesn't obstruct the work area or disrupt the vision systems

WLS28 LED Strip Lights

28 mm
21 mm

Stand-Alone
Cable Models

Stand-Alone
Push Button
QD Models

Sealed
Cascadable
Models

Motion
Detector
Models

32 mm

Lighted
Length

Lensed
Cascadable
Models

Lighted Length (mm)

145	570	990
285	710	1130
430	850	

Supply Voltage	Single- or Dual-color: 12 to 30 V dc Multicolor: 24 V dc
Construction	Clear anodized aluminum housing; painted zinc end caps; polycarbonate window on clear and diffuse plastic models; acrylic window on L25 models; zinc plated steel brackets
Operating/Storage Temperature	Models without motion detection: -40 to +70 °C (-40 to +158 °F) Models with motion detection: -20 to +60 °C (-4 to +140 °F)
Environmental Rating	Non-sealed models: IEC IP50 Sealed models: IEC IP65, IEC IP67, IEC IP69K per DIN 40050
Vibration and Mechanical Shock	Vibration 10-55 Hz 1.0 mm p-p amplitude per IEC 60068-2-6 Shock 15G 11 ms duration, half sine wave per IEC 60068-2-27
Certifications	

Accessories

Top Mount

SMBWLS28RA
(included with light)

Side Mount

SMBWLS28SM

Magnetic Mount
Shown with SMBWLS28RA

SMBWLSMAG
SMBWLSMAGR
Protective cover for
magnet sold separately

Snap Mount

SMBWLS28SP

PSD-24-4 Class 2 Power Supply
Input: 90-264 V ac 1.5A
Output: 24 V dc 3.9A
2 m (6.5') 4-Pin Euro Connector

WLS28-2MQ
In-Line Motion
Detection Switch with
M12 Connectors

WLS28-2PBQ
In-Line Switch with
M12 Connectors

4-Pin M12/Euro-Style Straight connector models listed; for right-angle, add RA to the end of the model number (example, MQDC-406RA)	**MQDC-406** 2 m (6.5') **MQDC-415** 5 m (15') **MQDC-430** 9 m (30')
4-Pin M12/Euro-Style Double-Ended (straight male/straight female connectors)	**MQDEC-401SS** 0.3 m (1') **MQDEC-403SS** 1 m (3') **MQDEC-406SS** 2 m (6.5')
4-Pin M12/Euro-Style Splitter	**CSB-M1241M1241** 0.3 m (1') male trunk; 2 x 0.3 m (1') female branches

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more sensors, more solutions