Selection Guide

Touch Buttons

	S22	K30	K50	K70	K30L/K50L Push Button	OTB	VTB	Illuminated E-Stops	Flush-Mount Illuminated E-Stops
Page	102	104	106	108	110	112	114	116	118
Family Name	S22	K30	K50	K70	K30L/K50L Push Button	OTB	VTB	Illuminated E-Stops	Flush-Mount Illuminated E-Stops
Size (mm)	20 mm surface	30 mm dome	50 mm dome	70 mm dome	30/50 mm dome	74.2 x 59.9 x 43.2	73.3 x 43.2 x 43.2	119.8 x ø 80	102.1 x 80.8 x 80.3
Actuation Method									
Color Available		●●●●○	●●●●○	●●●●○	●●●●○		●●●	●●●	●●●
Multicolor Option	⬤		⬤						
IP Rating	IP66, IP67, IP69K	IP67, IP69K	IP67, IP69K	IP65	IP65	IP66	IP66	IP65	IP65
Logic Funtion	F2, H	F2, H	F2, H	F2, H					

Pick-to-Light

102	120	106	124	126	128	130	132	136	134
S22	**K30**	**K50**	**K70L**	**K50 Optical**	**K50 Modbus**	**K30/K50/K80 Push Button**	**PVD**	**PVL**	**PVA**
20 mm surface	30 mm dome	50 mm dome	70 mm dome	50 mm dome	50 mm dome	30/50/50 mm dome	137.8 or 266.4	327.5 or 608	137.8 to 416.6
					or				
IP66, IP67, IP69K	IP67, IP69K	IP67, IP69K	IP65	IP67, IP69K	IP67	IP67	IP62	IP50	IP62
C, E, C3, C4	C. D. E	C. D. E C3, C4	C. D. E C3, C4	C. D. E C3, C4	S1	C. D. E C3, C4			

Optical   Mechanical   Capacitive

Logic Functions

Illuminated buttons are available with different logic options to solve a variety of applications with optimized wiring. Multicolor models provide clear operator guidance to improve speed and accuracy.

PICK-TO-LIGHT: Two-color logic options for error-proofing, picking, putting and verification

C	Input activates Color 1. Touch activates Color 2 and Output.
D	Input activates Color 1. Touch activates Output.
E	Input activates Color 1. Touch activates Output. Touch with inactive input activates Color 2.

MULTIPURPOSE: Full color control via three inputs independent of button; momentary output follows button

F2	Three inputs activate three colors. Color 3 overrides Colors 1 and 2, and Color 2 overrides Color 1. Touch changes output state.

ILLUMINATED BUTTONS: One or two colors with momentary or latching bipolar outputs that follow button

H	Power activates Color 1. Touch changes bipolar output state and activates Color 2. Latch and momentary options.

SPECIALTY PICK-TO-LIGHT: Three-color logic options for error-proofing, picking, putting and verification

C3	Input activates Color 1. Touch with active input activates Color 3 and Output. Touch with inactive input activates Color 2 and Output.
C4	Input activates Color 1. Touch with active input activates Color 3 and Output. Touch with inactive input activates Color 2 and Output for 5 seconds.

MODBUS: Color control and input monitoring via Modbus RTU

S1	Modbus commands activate Colors. Touch activates Modbus output.

Actuation Methods

The actuation method is the means by which an operator's actions are sensed. Banner's Pick-to-Light line includes a variety of actuation methods, including contact and non-contact sensors covering a single point on a small bin or a wide opening on a large bin. These actuation methods enable error proofing in a large variety of assembly and kitting applications. Below is a description of each actuation method offered to help you select the best solution for your specific application.
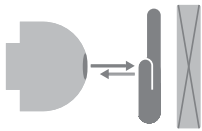
Push Buttons

Push buttons take physical force to press and actuate the button.

Touch Buttons

Touch buttons can be actuated with no force, just contact with the surface. The contact can be made with a whole hand, palm or finger.

Fixed-Field Mode

Background suppression sensors have a definite limit to their sensing range, ignoring objects that lie beyond their range.

Fixed-field sensors compare the amount of reflected light that is seen by two differently aimed receiver elements. If the light reaching the second receiver element is equal to or greater than the light reaching the first receiver element, then the object will be recognized.
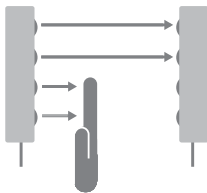
Emitter/Receiver

In opposed-mode sensing, the sensor's emitter and receiver are housed in two separate units. The emitter is placed opposite the receiver, so that the light beam goes directly from the emitter to the receiver.
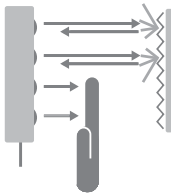
Retroreflective Mode

Retroreflective sensors contain both the emitter and receiver elements. The beam(s) is(are) established between the emitter, the retroreflector and the receiver. An object is sensed when it interrupts or "breaks" the effective beam.
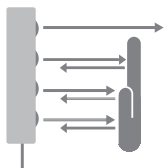
Diffuse

With a diffuse-mode sensor, the object is detected when the object reflects the sensor's transmitted light energy back to the sensor.

S22 Flush-Mount Touch Buttons

- Large, bright illuminated area for clear visibility of input and touch status
- Flush mount design sits tight against panel, machine and bracket surfaces
- Independent color control or preconfigured models to suit your indication needs
- Momentary versions remain activated as long as touch is present, while latching versions toggle between activated and not activated states on successive touches
- Excellent immunity to false triggering by water spray, detergents, oils, and other foreign materials
- Rugged, water-resistant IP69K design for washdown environments
- Ergonomically designed to eliminate hand, wrist and arm stresses, requiring no physical pressure to operate and can be actuated with bare hands or work gloves

RGB Multicolor

Family	Output State	Output Function	Activation Method	Material	Color**	Connector
S22	A	M	T	S	RGB7	QP

A = Normally Open
R = Normally Closed

M = Momentary
L = Latching

T = Touch

S = Standard
F = FDA Grade

🔴 **RGB7** = RGB Multicolor

** Green, Yellow, Red, Blue, White, Cyan, Magenta

Blank = 2 m Integral Cable
QP = Euro Pigtail QD

QD models require mating cordset
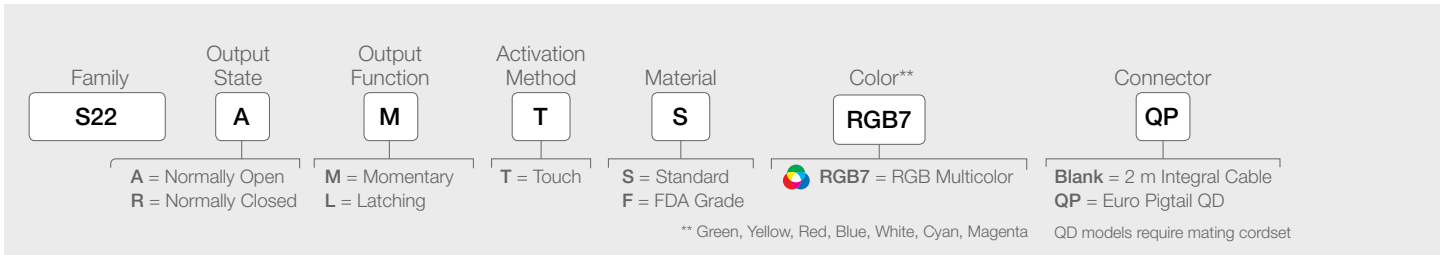
One- or Two-Color/Function

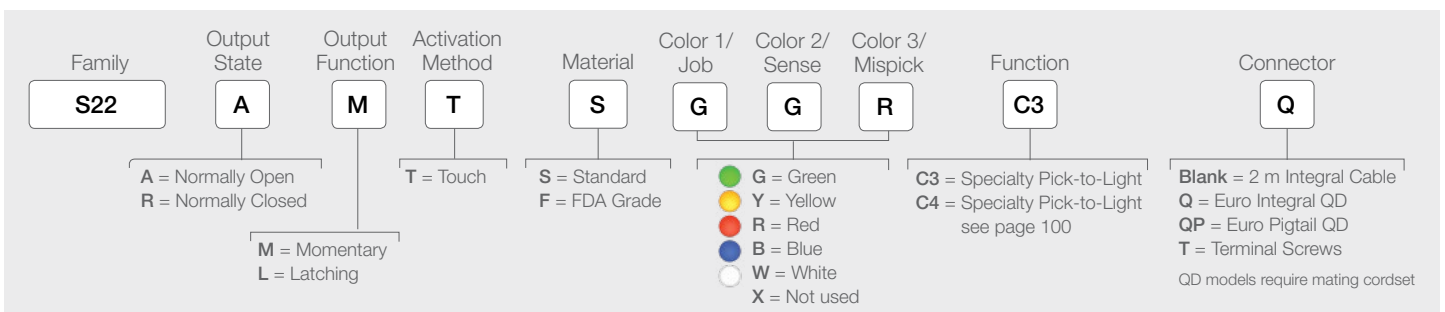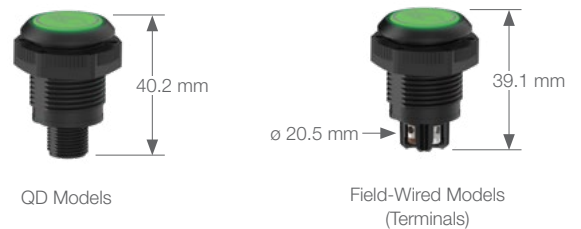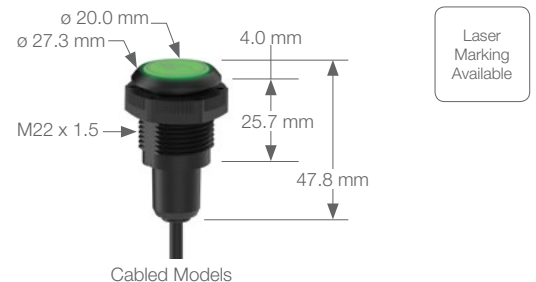| Family	Output State	Output Function	Activation Method	Material	Color 1/Job	Color 2/Sense	Function	Connector
S22	A	M	T	S	G	R	H	Q

A = Normally Open
R = Normally Closed

M = Momentary
L = Latching

T = Touch

S = Standard
F = FDA Grade

🟢 **G** = Green
🟡 **Y** = Yellow
🔴 **R** = Red
🔵 **B** = Blue
⚪ **W** = White
X = Not used

H = Illuminated Buttons
C = Pick-to-Light
E = Pick-to-Light
see page 100

Blank = 2 m Integral Cable
Q = Euro Integral QD
QP = Euro Pigtail QD
T = Terminal Screws

QD models require mating cordset

One-, Two-, or Three Color/Function

Family	Output State	Output Function	Activation Method	Material	Color 1/Job	Color 2/Sense	Color 3/Mispick	Function	Connector
S22	A	M	T	S	G	G	R	C3	Q

A = Normally Open
R = Normally Closed

M = Momentary
L = Latching

T = Touch

S = Standard
F = FDA Grade

🟢 **G** = Green
🟡 **Y** = Yellow
🔴 **R** = Red
🔵 **B** = Blue
⚪ **W** = White
X = Not used

C3 = Specialty Pick-to-Light
C4 = Specialty Pick-to-Light
see page 100

Blank = 2 m Integral Cable
Q = Euro Integral QD
QP = Euro Pigtail QD
T = Terminal Screws

QD models require mating cordset

Supply Voltage	10 to 30 V dc
Supply Current	80 mA max current (exclusive of load)
Supply Protection Circuitry	Protected against reverse polarity and transient voltages
Construction	Housing: Polycarbonate or FDA grade plastic, depending on model
Translucent dome: Polycarbonate or FDA grade plastic, depending on model
Mounting Nut: PBT or FDA grade plastic
Environmental Rating	Standard: UL Type 4x, 13
FDA Grade: UL Type 4x (indoor)
Cable, Pigtail, QD models: IEC IP66, IP67, IP69K per DIN 40050-9 on front and back
Terminal models: IEC IP66, IP67, IP69K per DIN 40050-9 on front only
Connections	2 m PVC integral cable, integral Euro-style QD
150 mm Euro-style pigtail QD or terminal screws
Operating Conditions	Temperature: –40 to +50 °C
Storage Temperature: –40 to +70 °C
Certifications	CE c(UL)us LISTED

ø 20.0 mm
ø 27.3 mm
4.0 mm
M22 x 1.5
25.7 mm
47.8 mm

Laser Marking Available

Cabled Models

40.2 mm

QD Models

39.1 mm
ø 20.5 mm

Field-Wired Models (Terminals)

SMB22A

SMB22FVK

SMBAMS22P

5-Pin Euro-Style
Straight connector models listed; for right-angle models, add RA to the end of model number (example, MQDC1-506RA)

MQDC1-506
2 m (6.5')
MQDC1-515
5 m (15')
MQDC1-530
9 m (30')

5-pin M12 Euro-Style Washdown Cordset
Straight connector models only

MQDC-WDSS-0506
2 m (6.5')
MQDC-WDSS-0515
5 m (15')
MQDC-WDSS-0530
9 m (30')

Additional accessories are available at bannerengineering.com

K30 Illuminated Touch Buttons

- Ergonomic design requires no physical pressure to operate, preventing stress on hands and wrists
- Simple operation with the touch of a finger
- Easily actuated with bare hands or work gloves
- Rugged, fully encapsulated IP69K construction for high-pressure wash-down environments
- Models with either latching or momentary outputs
- 1-, 2-, or 3- color models available to solve a variety of applications

Independent Input/Output Models with up to Three Indicator Colors Controlled by Separate Inputs

The output is activated by touching the device and is totally independent of the indicator inputs.

Family	Output State	Input/ Output	Activation Method	Color 1	Color 2	Color 3	Function	Connection*
K30	A	P	T2	G	R	Y	F2	Q

Output State
A = Normally Open
R = Normally Closed

Input/Output
P = PNP
N = NPN

Activation Method
T2 = Touch
T2F = Touch, FDA Grade

Color
● G = Green   ● B = Blue
● Y = Yellow   ○ W = White
● R = Red   X = Not Used

Function
F2 = Multipurpose see page 100

Connection*
Blank = 2 m Integral Cable
Q = Euro Integral QD
QP = Euro Pigtail QD
T = 5-Screw Terminal
QD models require mating cordset

One- or Two-Color Momentary or Latching Bipolar (1 NPN and 1 PNP) Output Models

These models do not have inputs to control the indicator. The color of the indicator is determined by the non-activated or activated condition.

Family	Output State	Output Function	Output Type	Activation Method	Color (not activated)	Color (activated)	Function	Connection*
K30	A	L	B	T2	G	R	H	Q

Output State
A = Normally Open
R = Normally Closed

Output Function
Blank = Momentary
L = Latching

Output Type
B = Bipolar Output (NPN & PNP)

Activation Method
T2 = Touch
T2F = Touch, FDA Grade

Color
● G = Green   ● B = Blue
● Y = Yellow   ○ W = White
● R = Red   X = Not Used

Function
H = Illuminated Buttons see page 100

Connection*
Blank = 2 m Integral Cable
Q = Euro Integral QD
QP = Euro Pigtail QD
T = 5-Screw Terminal
QD models require mating cordset

* FDA Grade models only available with pigtail QD

Supply Voltage	12 to 30 V dc
Construction	Housing: Polycarbonate Translucent dome: Polycarbonate Mounting Nut: PBT
Environmental Rating	IEC IP67, IP69K per DIN 40050
Operating Temperature	–40 to +50 °C (–40 to +122 °F)
Certifications	CE c(UL)us LISTED

Laser Marking Available

ø 30.0 mm
23.5 mm
41.0 mm
ø 22.0 mm

K30 Touch

K30 Touch FDA Grade

SMB22A

SMB22FVK

SMBAMS22P

SMB22RAVK

TC-K30-CL
Touch Guard

4-Pin M12/Euro-Style
Straight connector models listed; for right-angle models, add RA to the end of model number (example, MQDC-406RA)

MQDC-406
2 m (6.5')
MQDC-415
5 m (15')
MQDC-430
9 m (30')

Additional accessories are available at bannerengineering.com
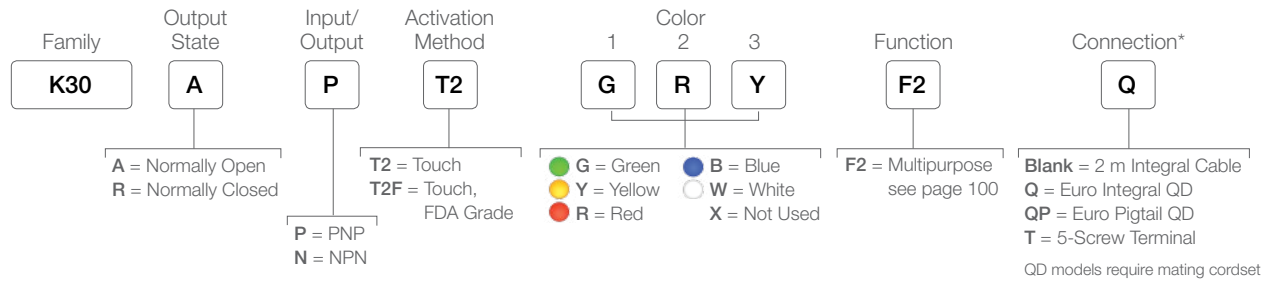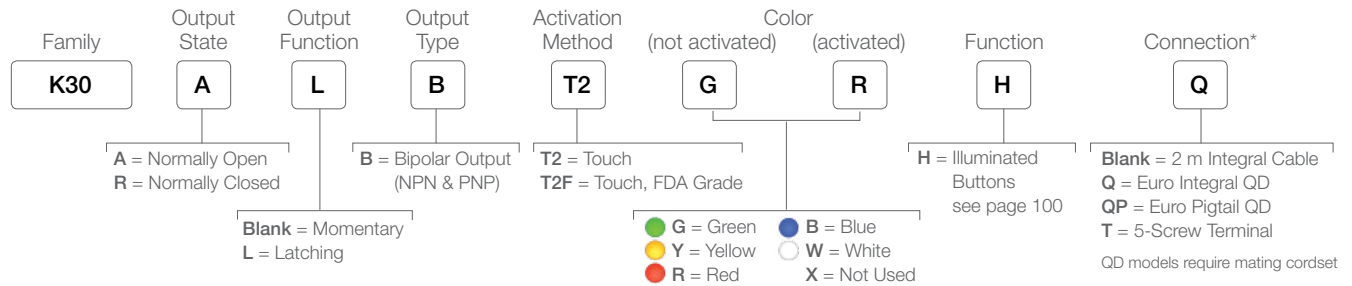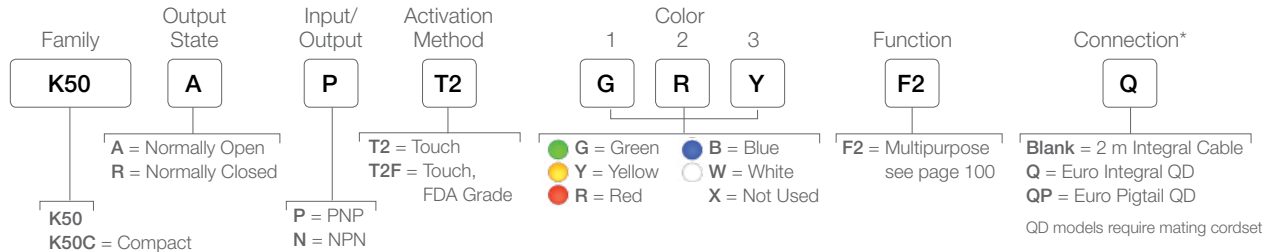
K50 Illuminated Touch Buttons

- Ergonomic design requires no physical pressure to operate, preventing stress on hands and wrists
- Simple operation with the touch of a finger, hand or whole palm
- Easily actuated with bare hands or work gloves
- Rugged, fully encapsulated IP69K construction for high-pressure wash-down environments
- Models with either latching or momentary outputs
- One-, two- and three-color models available to solve a variety of applications
- Smart electric field sensing on second generation models provides excellent immunity to false triggering from water spray, detergents and other foreign materials
- Second generation models feature superior electrical noise immunity
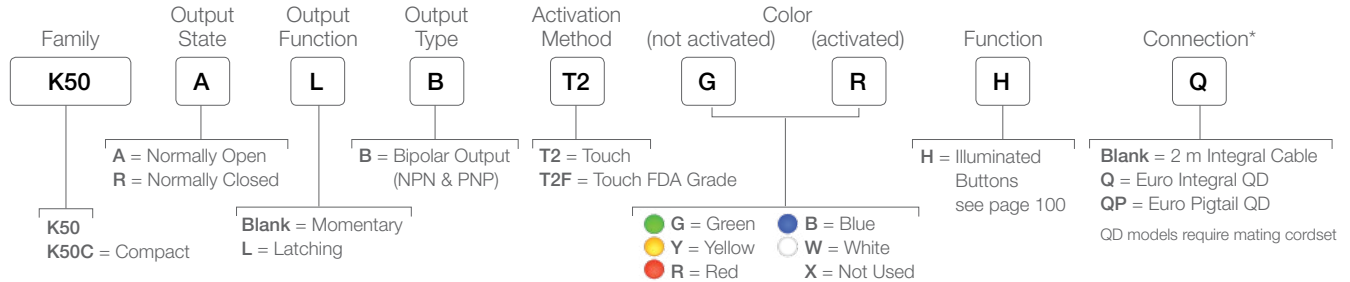- Models made with food-grade materials available

Independent Input/Output Models with up to Three Indicator Colors Controlled by Separate Inputs

The output is activated by touching the device and is totally independent of the indicator inputs.

Family	Output State	Input/ Output	Activation Method	Color			Function	Connection*
				1	2	3		
K50	**A**	**P**	**T2**	**G**	**R**	**Y**	**F2**	**Q**

A = Normally Open
R = Normally Closed

K50
K50C = Compact

P = PNP
N = NPN

T2 = Touch
T2F = Touch, FDA Grade

🟢 **G** = Green   🔵 **B** = Blue
🟡 **Y** = Yellow   ⚪ **W** = White
🔴 **R** = Red   **X** = Not Used

F2 = Multipurpose see page 100

Blank = 2 m Integral Cable
Q = Euro Integral QD
QP = Euro Pigtail QD
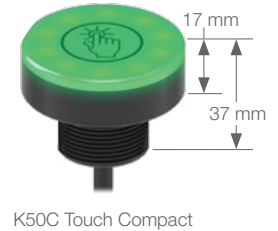
QD models require mating cordset

One- or Two-Color Momentary or Latching Bipolar (1 NPN and 1 PNP) Output Models

These models do not have inputs to control the indicator. The color of the indicator is determined by the non-activated or activated condition.

Family	Output State	Output Function	Output Type	Activation Method	Color (not activated)	Color (activated)	Function	Connection*
K50	**A**	**L**	**B**	**T2**	**G**	**R**	**H**	**Q**

A = Normally Open
R = Normally Closed

K50
K50C = Compact

Blank = Momentary
L = Latching

B = Bipolar Output (NPN & PNP)

T2 = Touch
T2F = Touch FDA Grade

🟢 **G** = Green   🔵 **B** = Blue
🟡 **Y** = Yellow   ⚪ **W** = White
🔴 **R** = Red   **X** = Not Used

H = Illuminated Buttons see page 100

Blank = 2 m Integral Cable
Q = Euro Integral QD
QP = Euro Pigtail QD

QD models require mating cordset

* FDA Grade models only available with pigtail QD

Supply Voltage	12 to 30 V dc
Construction	Housing: Polycarbonate Translucent dome: Polycarbonate Mounting Nut: PBT
Environmental Rating	Standard: UL Type 4x, 13 FDA Grade: UL Type 4x IEC IP67, IP69K per DIN 40050
Operating Temperature	−40 to +50 °C (−40 to +122 °F)
Certifications	CE c(UL)us LISTED

Laser Marking Available

50 mm — 35 mm / 55 mm
30 mm —
K50 Touch

K50 Touch FDA Grade

17 mm / 37 mm
K50C Touch Compact

SMB30A

SMB30FA

SMB30FVK

SMB30SC

TC-K50-CL or TC-K30-CL
Touch Guard

Additional accessories are available at
bannerengineering.com

4-Pin M12/Euro-Style
For use with K30 models

Straight connector models listed; for right-angle models, add RA to the end of model number (example, MQDC-406RA)

MQDC-406
2 m (6.5')
MQDC-415
5 m (15')
MQDC-430
9 m (30')

5-Pin M12/ Euro-Style
Straight connector models listed; for right-angle models, add RA to the end of model number (example, MQDC1-506RA)

MQDC1-506
2 m (6.5')
MQDC1-515
5 m (15')
MQDC1-530
9 m (30')

8-Pin M12/Euro-Style
For use with 3 color F2 models.

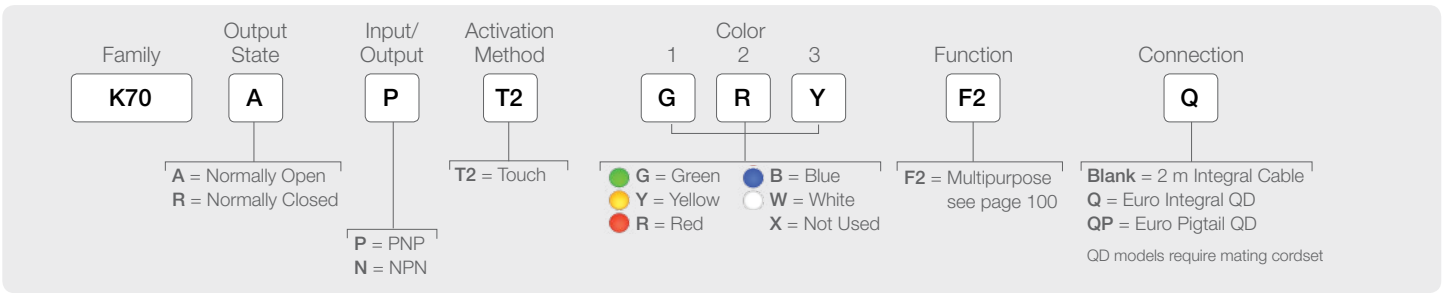Straight connector models listed; for right-angle models, add RA to the end of model number (example, MQDC2S-806RA)

MQDC2S-806
2 m (6.5')
MQDC2S-815
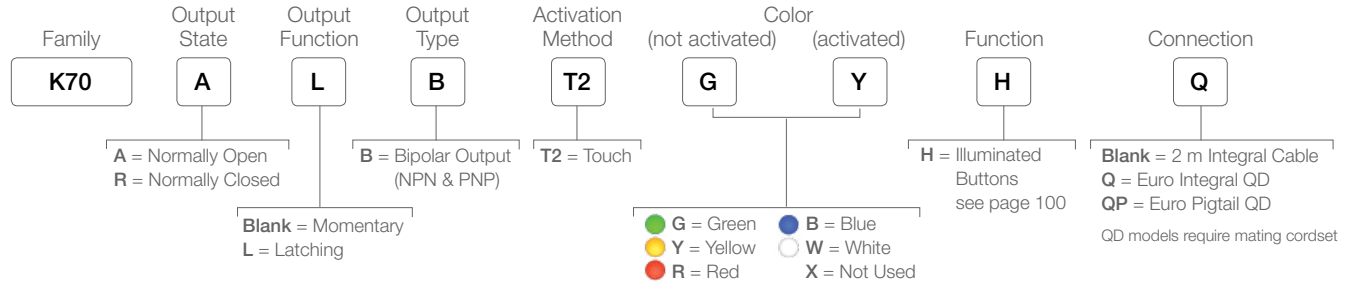5 m (15')
MQDC2S-830
9 m (30')

K70 Illuminated Touch Button

- Excellent immunity to false triggering by water spray, detergents, oils, and other foreign materials
- Ergonomically designed to eliminate hand, wrist, and arm stresses associated with repeated switch operation; require no physical force to operate
- Can be actuated with bare hands or work gloves
- Rugged IP65 polycarbonate construction
- Momentary versions remain activated as long as touch is present
- Latching versions start up not activated and toggle between activated and not activated on successive touches
- Available in five color options and one-, two- and three-color models
- Wireless models simplify installation and provide a simple operator interface for pick-to-light, call button and general industrial applications
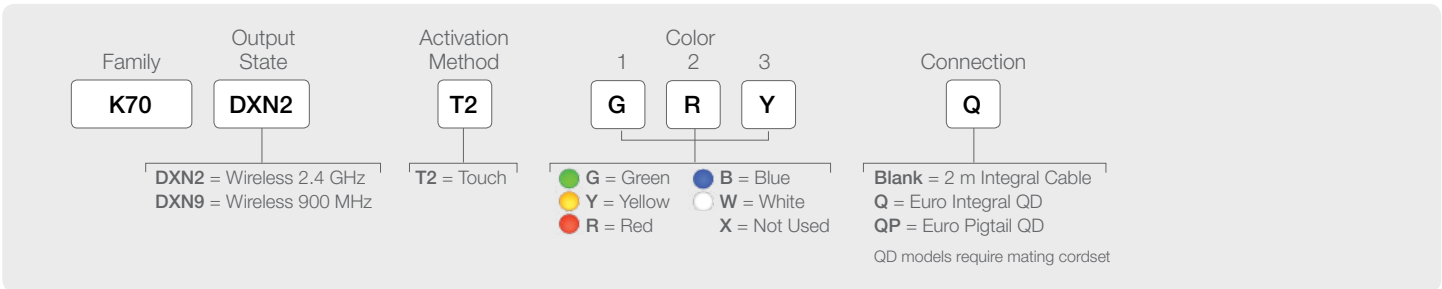
Independent Input/Output Models with up to Three Indicator Colors Controlled by Separate Inputs

Family	Output State	Input/ Output	Activation Method	Color 1	Color 2	Color 3	Function	Connection
K70	**A**	**P**	**T2**	**G**	**R**	**Y**	**F2**	**Q**

Output State
A = Normally Open
R = Normally Closed

Input/Output
P = PNP
N = NPN

Activation Method
T2 = Touch

Color
● G = Green   ● B = Blue
● Y = Yellow   ○ W = White
● R = Red   X = Not Used

Function
F2 = Multipurpose see page 100

Connection
Blank = 2 m Integral Cable
Q = Euro Integral QD
QP = Euro Pigtail QD
QD models require mating cordset

One- or Two-Color Momentary or Latching Bipolar (1 NPN and 1 PNP) Output Models

Family	Output State	Output Function	Output Type	Activation Method	Color (not activated)	Color (activated)	Function	Connection
K70	**A**	**L**	**B**	**T2**	**G**	**Y**	**H**	**Q**

Output State
A = Normally Open
R = Normally Closed

Output Function
Blank = Momentary
L = Latching

Output Type
B = Bipolar Output (NPN & PNP)

Activation Method
T2 = Touch

Color
● G = Green   ● B = Blue
● Y = Yellow   ○ W = White
● R = Red   X = Not Used

Function
H = Illuminated Buttons see page 100

Connection
Blank = 2 m Integral Cable
Q = Euro Integral QD
QP = Euro Pigtail QD
QD models require mating cordset

Wireless

Family	Output State	Activation Method	Color 1	Color 2	Color 3	Connection
K70	**DXN2**	**T2**	**G**	**R**	**Y**	**Q**

Output State
DXN2 = Wireless 2.4 GHz
DXN9 = Wireless 900 MHz

Activation Method
T2 = Touch

Color
● G = Green   ● B = Blue
● Y = Yellow   ○ W = White
● R = Red   X = Not Used

Connection
Blank = 2 m Integral Cable
Q = Euro Integral QD
QP = Euro Pigtail QD
QD models require mating cordset

Supply Voltage and Current	12 V to 30 V dc; 220 mA Max. at 12 V dc; 110 mA Max. at 30 V dc
Supply Protection Circuitry	Protected against transient voltages
Construction	Housing: Polycarbonate Dome: Polycarbonate
Environmental Rating	IEC IP65
Operating Temperature	−40 to 50 ºC
Certifications	CE (UL) LISTED

ø 70 mm

70.6 mm

95.5 mm

ø 30 mm

Laser Marking Available

SMB30A   SMB30MM   SMBAMS30P   SSA-MBK-EEC1

5-Pin M12/Euro-Style
Straight connector models listed; for right-angle models, add RA to the end of model number (example, MQDC1-506RA)
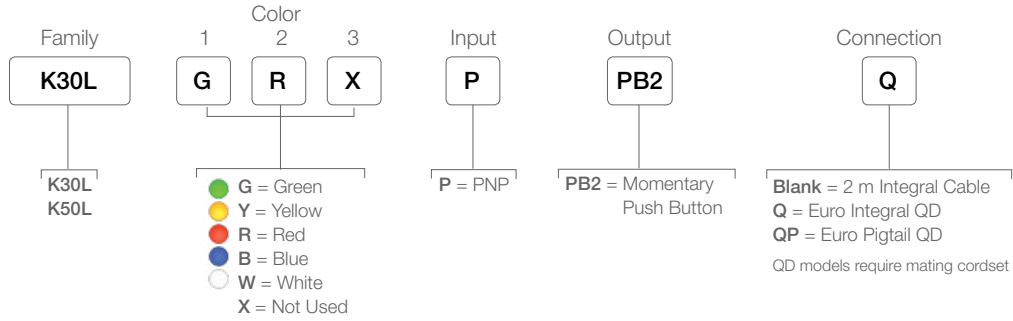
MQDC1-506
2 m (6.5')
MQDC1-515
5 m (15')
MQDC1-530
9 m (30')

Additional accessories are available at bannerengineering.com

K50L and K30L
Illuminated Push Buttons

- Three sourcing inputs control the green, yellow and red indicator lights
- Ideal for use in abusive environments, featuring rugged, fully encapsulated construction
- Cabled and Euro Quick Disconnect models available
- Available in momentary push button output

Family	Color			Input	Output	Connection
	1	2	3			
K30L	**G**	**R**	**X**	**P**	**PB2**	**Q**

K30L
K50L

● **G** = Green
● **Y** = Yellow
● **R** = Red
● **B** = Blue
○ **W** = White
　X = Not Used

P = PNP

PB2 = Momentary Push Button

Blank = 2 m Integral Cable
Q = Euro Integral QD
QP = Euro Pigtail QD

QD models require mating cordset

Supply Voltage	K30L: 10 to 30 V dc K50L: 12 to 30 V dc
Construction	Base: Polycarbonate Translucent dome: Polycarbonate Push button: Thermoplastic
Environmental Rating	IEC IP65
Operating Temperature	−40 to +50 °C (−40 to +122 °F)
Certifications	CE c(UL)us LISTED

ø 17.6 mm
ø 30.0 mm
ø 22.0 mm
31.9 mm
49.4 mm

K30 Push Models

ø 50 mm
ø 30.0 mm
43.7 mm
63.7 mm
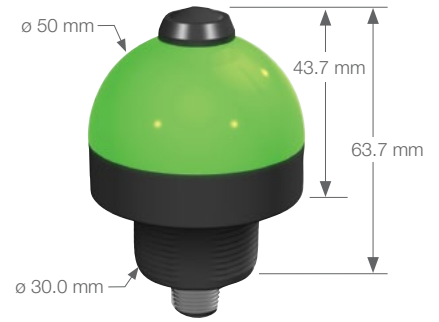
K50 Push Models

SMBCK30
use with K30L
on 28 mm pipe

SMB22A
use with K30L

SMB30A
use with K50L

Additional accessories are available at
bannerengineering.com
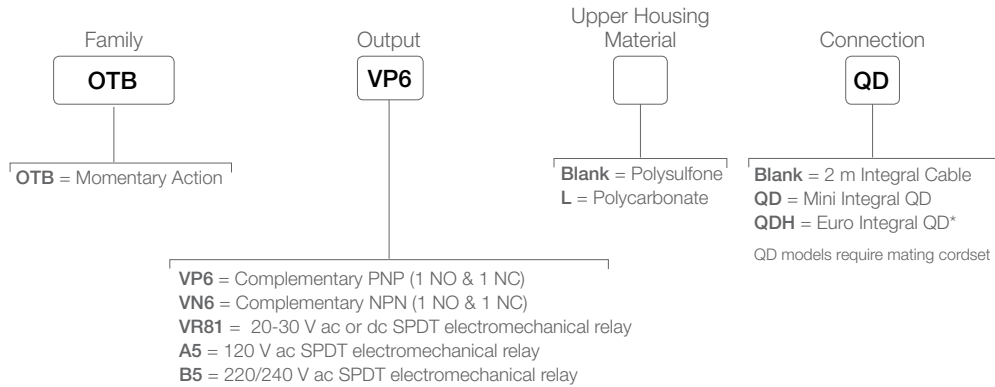
4-Pin M12/Euro-Style
For use with K30 models

Straight connector models listed;
for right-angle models, add RA
to the end of model number
(example, MQDC-406RA)

MQDC-406
2 m (6.5')
MQDC-415
5 m (15')
MQDC-430
9 m (30')

5-Pin M12/ Euro-Style
Straight connector models listed;
for right-angle models, add RA
to the end of model number
(example, MQDC1-506RA)

MQDC1-506
2 m (6.5')
MQDC1-515
5 m (15')
MQDC1-530
9 m (30')

8-Pin M12/Euro-Style
For use with 3 color F2 models.

Straight connector models listed;
for right-angle models, add RA
to the end of model number
(example, MQDC2S-806RA)

MQDC2S-806
2 m (6.5')
MQDC2S-815
5 m (15')
MQDC2S-830
9 m (30')

OTB Optical Touch Buttons

- OPTO-TOUCH Optical Touch Buttons are zero-force ergonomic replacements for mechanical push buttons.
- OTB models are momentary-action touch buttons with electromechanical relay or solid-state outputs.

Family	Output	Upper Housing Material	Connection
OTB	**VP6**		**QD**

OTB = Momentary Action

Blank = Polysulfone
L = Polycarbonate

Blank = 2 m Integral Cable
QD = Mini Integral QD
QDH = Euro Integral QD*

QD models require mating cordset

VP6 = Complementary PNP (1 NO & 1 NC)
VN6 = Complementary NPN (1 NO & 1 NC)
VR81 = 20-30 V ac or dc SPDT electromechanical relay
A5 = 120 V ac SPDT electromechanical relay
B5 = 220/240 V ac SPDT electromechanical relay

* Only available for OTBVP6 or OTBVN6 models

Supply Voltage	Models for 105 to 130 V ac, 210 to 250 V ac (50/60 Hz), 10 to 30 V dc, or 20 to 30 V ac/dc
Construction	Upper Housing: Black polysulfone or Polycarbonate Base: Fiber-reinforced PBT
Environmental Rating	IEC IP66 NEMA 1, 3, 4X, 12 and 13
Operating Temperature	-20 to +50°C (-4 to +122°F)
Certifications	CE CSA® c\[UL\]us

59.9 mm — 43.2 mm — 57.1 mm — ø 30 mm

SMB30A

SMB30MM

SMB30SC

Optional Field Covers

Black	**OTC-1-BK**
Green	**OTC-1-GN**
Red	**OTC-1-RD**
Yellow	**OTC-1-YW**

Black	**OTCL-1-BK**
Green	**OTCL-1-GN**
Red	**OTCL-1-RD**
Yellow	**OTCL-1-YW**

Additional accessories are available at
bannerengineering.com

4-Pin M12/ Euro-Style
Straight connector models listed; for right-angle models, add RA to the end of model number (example, MQDC-406RA)

MQDC-406
2 m (6.5')
MQDC-415
5 m (15')
MQDC-430
9 m (30')

4-Pin Mini-Style

MBCC-406
1.83 m (6')
MBCC-412
3.66 m (12')
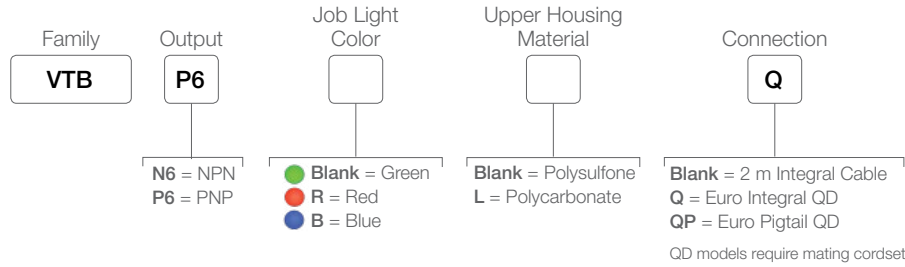**MBCC-430**
9.14 m (30')

5-Pin Mini-Style

MBCC-506
1.83 m (6')
MBCC-512
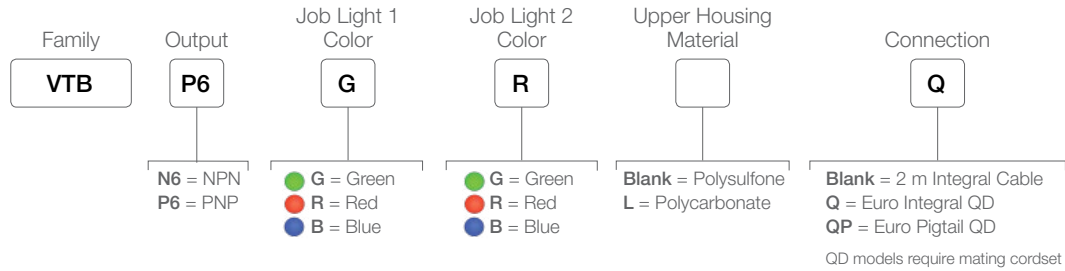3.66 m (12')
MBCC-530
9.14 m (30')

VTB Verification Touch Buttons

- Replaces capacitive touch switches and mechanical push buttons
- Features illuminated base (to provide a bright, easy-to-see job light) solid, flashing or multiple color models available
- Offers choice of models with red, green or blue job light
- Require no physical pressure to operate, eliminating hand, wrist and arm stresses associated with repeated switch operation
- Offers a cost-effective and easy-to-install pick-to-light solution for areas that cannot accommodate a light screen
- Cuts through heavy airborne contamination to function in almost any environment
- Withstands exposure to a variety of chemicals, depending on model

One-Color Illuminated Base Models

Family	Output	Job Light Color	Upper Housing Material	Connection
VTB	**P6**			**Q**

N6 = NPN
P6 = PNP

🟢 **Blank** = Green
🔴 **R** = Red
🔵 **B** = Blue

Blank = Polysulfone
L = Polycarbonate

Blank = 2 m Integral Cable
Q = Euro Integral QD
QP = Euro Pigtail QD

QD models require mating cordset

Two-Color Illuminated Base Models

Family	Output	Job Light 1 Color	Job Light 2 Color	Upper Housing Material	Connection
VTB	**P6**	**G**	**R**		**Q**

N6 = NPN
P6 = PNP

🟢 **G** = Green
🔴 **R** = Red
🔵 **B** = Blue

🟢 **G** = Green
🔴 **R** = Red
🔵 **B** = Blue

Blank = Polysulfone
L = Polycarbonate

Blank = 2 m Integral Cable
Q = Euro Integral QD
QP = Euro Pigtail QD

QD models require mating cordset

Supply Voltage	12 to 30 V dc
Construction	Upper Housing: Polysulfone or polycarbonate Base: White polycarbonate
Environmental Rating	IP66
Operating Temperature	-20 to +50 °C (-4 to +122 °F)
Certifications	CE $_c$**RU**$_{us}$

59.9 mm
43.2 mm
57.1 mm
30.0 mm

SMB30MM   **SMB30FA**   **SMB30SC**   **SMBAMS30RA**

4-Pin M12/Euro-Style
For use with K30 models

Straight connector models listed; for right-angle models, add RA to the end of model number (example, MQDC-406RA)

MQDC-406
2 m (6.5')
MQDC-415
5 m (15')
MQDC-430
9 m (30')

5-Pin M12/ Euro-Style
Straight connector models listed; for right-angle models, add RA to the end of model number (example, MQDC1-506RA)

MQDC1-506
2 m (6.5')
MQDC1-515
5 m (15')
MQDC1-530
9 m (30')

Optional Field Covers

Black	**OTC-1-BK**
Green	**OTC-1-GN**
Red	**OTC-1-RD**
Yellow	**OTC-1-YW**

Black	**OTCL-1-BK**
Green	**OTCL-1-GN**
Red	**OTCL-1-RD**
Yellow	**OTCL-1-YW**

Additional accessories are available at
bannerengineering.com

30 mm Mount
Illuminated E-Stops

- Available with two-color: yellow and red, one color: red
- Reduces intensive labor costs with a fully enclosed E-Stop button ready for installation
- Multiple buttons can be wired in series, with built-in logic allowing for clear indication of pushed button
- Latching design complies with ISO 13850 direct (positive) opening operation per IEC 60947-5-1
- Rugged design rated to IP65
- Available with illuminated Safety BUS Gateway compatibility

Model*	Description	Illumination
SSA-EB1PLYR-12ECQ8	2NC / 1NO (PNP)	YEL/RED-Flash/Solid
SSA-EB1PLGR-12ECQ8	2NC / 1NO (PNP)	GREEN/RED-Flash/Solid
SSA-EB1PLXR-12ECQ8	2NC / 1NO (PNP)	OFF/RED-Flash/Solid
SSA-EB1PL-12ECQ8	2NC / 1NO (PNP)	OFF/RED-Solid/Solid
SSA-EB1PLYR-02ECQ5A	2NC – Safety BUS node compatible	YEL/RED-Flash

Model*	Description	Illumination
SSA-EB1PLYR-02ECQ5B	2NC – Safety BUS node compatible	YEL/RED-Flash
SSA-EB1PLXR-02ECQ5A	2NC – Safety BUS node compatible	OFF/RED-Flash
SSA-EB1PLXR-02ECQ5B	2NC – Safety BUS node compatible	OFF/RED-Flash
SSA-EB1PL-02ECQ5A	2NC – Safety BUS node compatible	OFF/RED-Solid
SSA-EB1PL-02ECQ5B	2NC – Safety BUS node compatible	OFF/RED-Solid

* Washdown cover can be ordered separately or ad -WC to the end of the model number

Supply Voltage	12 to 30 V dc
Construction	Upper Housing: Polycarbonate/Polymide Base: White polycarbonate
Environmental Rating	IP65, IP69K with cover
Operating Temperature	Temperature: –25 to +55 °C (–13 to +131 °F) Humidity: 45% to 85% RH (no condensation)
Certifications	CE cULus LISTED

119.8 mm

ø 80 mm

SSA-EB1P-ECWC

CSS Series Hookup Cordset Solution

This interconnection solution allows for quick hookup of a series string of emergency stop buttons. The user must ensure that the CSS series hookup cordsets are installed so that they cannot be easily defeated by not allowing access to the QD connectors or allowing improper connection bypassing the function of the Emergency Stop.

(B)   (A)   (C)
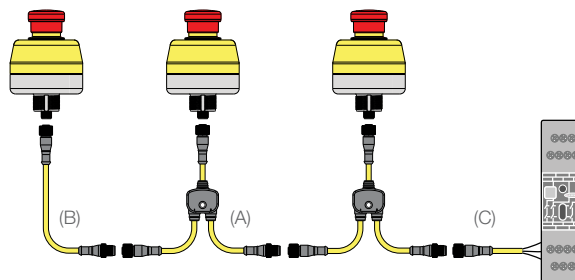
SSA-MBK-EEC1   SSA-MBK-EEC2   SSA-MBK-EEC3

Cordsets available on page 119

Flush-Mount Illuminated E-Stop Buttons

- Available with two-color: yellow (or green) and red or one color: red
- Rugged design rated to IP65
- Available with illuminated Safety BUS Gateway compatibility
- Latching design complies with ISO 13850 direct (positive) opening operation per IEC 60947-5-1
- Safe Break Action ensures NC contacts will open if the contact block is separated from the actuator
- Multiple buttons can be interfaced and series connected with CSS Series Hookup Cordsets
- Compliant with ANSI B11.19, ANSI NFPA79, and IEC/EN 60204-1 Emergency Stop requirements

Illuminated Flush-mount E-Stop Push-Buttons

Model	Description	Illumination
SSA-EB1PLYR-12ED1Q8	2NC / 1NO (PNP)	YEL/RED-Flash/Solid
SSA-EB1PLGR-12ED1Q8	2NC / 1NO (PNP)	GREEN/RED-Flash/Solid
SSA-EB1PLXR-12ED1Q8	2NC / 1NO (PNP)	OFF/RED-Flash/Solid
SSA-EB1PL-12ED1Q8	2NC / 1NO (PNP)	OFF/RED-Solid/Solid
SSA-EB1PLYR-02ED1Q5A	2NC – Safety BUS node compatible	YEL/RED-Flash

| Model	Description	Illumination
SSA-EB1PLYR-02ED1Q5B	2NC – Safety BUS node compatible	YEL/RED-Flash
SSA-EB1PLXR-02ED1Q5A	2NC – Safety BUS node compatible	OFF/RED-Flash
SSA-EB1PLXR-02ED1Q5B	2NC – Safety BUS node compatible	OFF/RED-Flash
SSA-EB1PL-02ED1Q5A	2NC – Safety BUS node compatible	OFF/RED-Solid
SSA-EB1PL-02ED1Q5B	2NC – Safety BUS node compatible	OFF/RED-Solid

Lockable Illuminated Flush-mount E-Stop Push-Buttons

Model	Description	Illumination
SSA-EB1MLYRP-12ED1Q8	2NC / 1NO (PNP)	YEL/RED-Flash/Solid
SSA-EB1MLGRP-12ED1Q8	2NC / 1NO (PNP)	GREEN/RED-Flash/Solid

Model	Description	Illumination
SSA-EB1MLXRP-12ED1Q8	2NC / 1NO (PNP)	OFF/RED-Flash/Solid
SSA-EB1MLP-12ED1Q8	2NC / 1NO (PNP)	OFF/RED-Solid/Solid

E-stops can be cascaded.
See diagram on page 117.

Supply Voltage	12 to 30 V dc
Construction	Upper Housing: Polycarbonate/Polymide Base: White polycarbonate
Environmental Rating	IP65
Operating Temperature	Temperature: –25 to +55 °C (–13 to +131 °F) Humidity: 45% to 85% RH (no condensation)
Certifications	C E

102.1 mm
80.3 mm
80.8 mm
111.9 mm
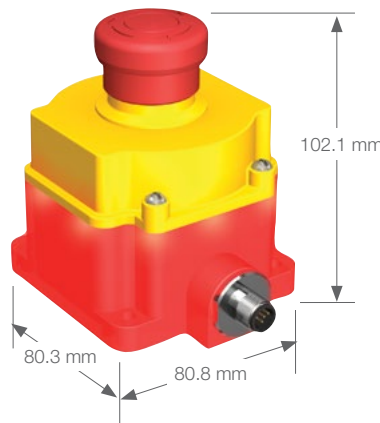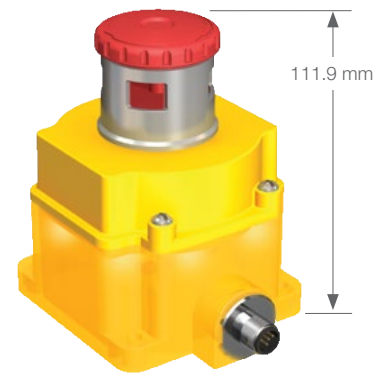
Illuminated Flush-mount Model   Lockable Illuminated Flush-mount Model

4-Pin M12/Euro-Style Straight connector models listed	**MQDC-406** 2 m (6.5') **MQDC-415** 5 m (15') **MQDC-430** 9 m (30')

5-Pin Double-Ended Euro-Style (Male/Female)	**DEE2R-51D** 0.31 m (1') **DEE2R-53D** 0.91 m (3') **DEE2R-58D** 2.44 m (8') **DEE2R-515D** 4.57 m (15')
	DEE2R-525D 7.62 m (25') **DEE2R-550D** 15.2 m (50') **DEE2R-575D** 22.9 m (75') **DEE2R-5100D** 30.5 m (100')

8-Pin M12/Euro-Style Straight connector models listed	**MQDC2S-806** 2 m (6.5') **MQDC2S-815** 5 m (15') **MQDC2S-830** 9 m (30')

8-Pin Double-Ended Euro-Style (Male/Female)	**DEE2R-81D** 0.31 m (1') **DEE2R-83D** 0.91 m (3') **DEE2R-88D** 2.44 m (8') **DEE2R-815D** 4.57 m (15')
	DEE2R-825D 7.62 m (25') **DEE2R-850D** 15.2 m (50') **DEE2R-875D** 22.9 m (75') **DEE2R-8100D** 30.5 m (100')

4-Pin M12 Euro-Style Splitter (Female/Male/Female)	CSS-M12F41M12M41M12F41
8-Pin M12 Euro-Style Splitter (Female/Male/Female)	CSS-M12F81M12M81M12F81