Push-button box
Smile 41



Approvals:

CE cULus LISTED TÜV NORD

Application:

- Safe stop of a machine or a process
- Start, reset, stop buttons

Features:

- Compact size
- LED indication
- Fast M12 connection
- Only 5 I/Os necessary

Smile 41 gathers up to four push-buttons and emergency stop button in a single compact device easily connected to a Pluto Safety PLC with only one M12 connector.

Reduced stock levels and development time

Smile 41 exists in two different models and is highly adaptable. A kit of coloured filters is supplied and the colour of each button can be chosen after delivery and changed later. Pluto manages automatically the lighting of all the buttons.

High level of safety with a simplified cabling

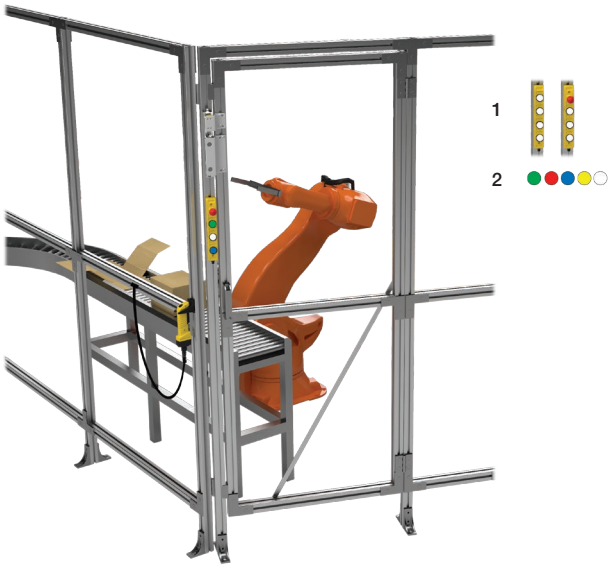
Though only one cable is used for the signals of the four buttons, an eventual short-circuit can be detected by the Pluto and the highest level of safety can be reached.

Faster installation

Thanks to its small size and centred mounting holes, Smile 41 is easy to position. The four buttons are connected with only one M12 connector which speeds up the connection.

Less downtime

Smile 41 is intended to be used with Pluto, an easy to use Safety PLC offering extensive communication possibilities, thus enhancing user friendliness and simplifying troubleshooting.



1. Choose your model
2. Choose the color of the push-button by using one of the provided filter.

For example:
Blue is quite common for a reset button, and white for a start button. You can choose and change opinion as you please.

Our example uses a Smile 41 EWWWP
- The emergency stop button stops all movement in the cell when pushed.
- One push-button is used to request the unlocking of the door.
- One push-button is used as reset button.
- One push-button is used as start button.

Models and ordering data

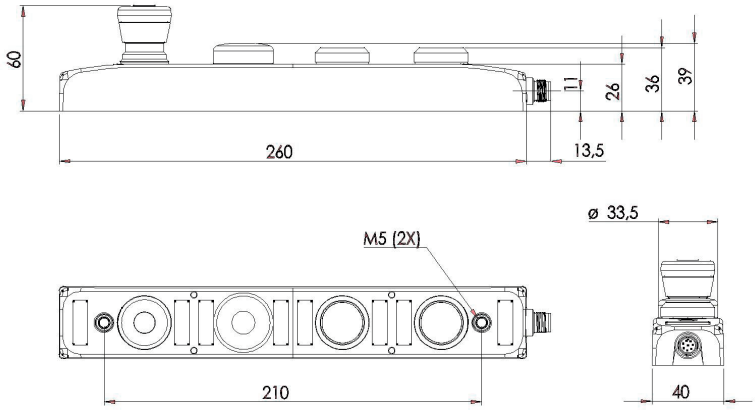
Smile 41 WWWWP	2TLA030057R0000	4 push-buttons and kit of filters
Smile 41 EWWWP	2TLA030057R0100	1 emergency stop + 3 push-buttons and kit of filters
Kit of coloured filters (spare part)	2TLA030059R2600	Blue, green, red, white, yellow

Smile 41 requests a cable with one M12 female connector on the Smile 41 side and 8 conductors.
For cables with M12 connectors, see our Product list “Accessories, connectors and cables”.

Technical data – Smile 41

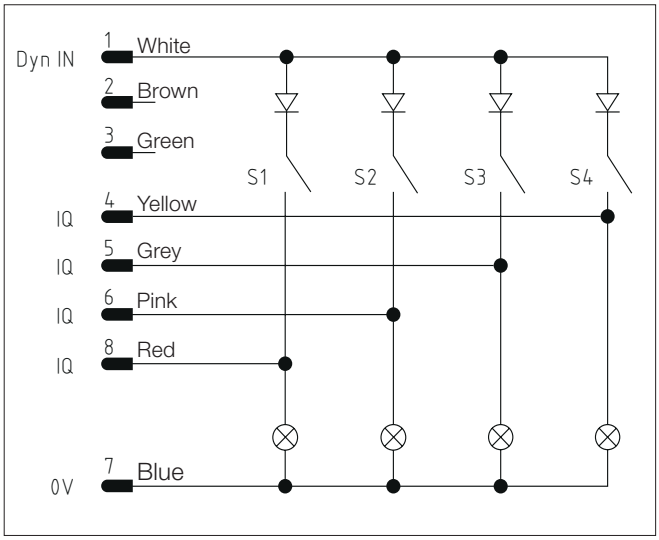
Functional Safety Data		
IEC/EN 61508-1…7	SIL3, PFD_{avr}: $2.95x10^{-6}$, PFH_d: $6.95x10^{-9}$	
EN 62061	SIL3	
EN ISO 13849-1	Up to PL e/Cat.4 - MTTFd: High	
EN 60947-5-1 & -5	For emergency stop button / safety stop button	
EN ISO 13850:2008	For emergency stop button / safety stop button	
To reach the highest of safety, the Pluto Safety PLC used should have OS 3.6 or higher.		
Certificates	Certificates and manuals with additional information can be found on www.abb.com/jokabsafety	
Operating voltage	24 VDC ± 15%	
Total current consumption		
Emergency stop button LED indication	20 mA	
Illuminated push button LED indication	20 mA during activation	
Protection class	IP65	
Ambient temperature	-25…+50°C	
Size	60 x 40 x 260 mm (+13.5 mm M12 connector)	
Weight	0.19 kg	
Colour		
Box	Yellow	
Emergency stop button	Red	
Illuminated push button	White (without colour filter)	
Connector	M12-8 pin male	
Connections	See Electrical diagrams	
	Emergency stop button	**Illuminated push button**
Actuating force	22 ± 4 N	7 ±3 N
Actuator travel	Approx. 4 mm to latch	Approx. 4 mm
Mechanical life	> 50 000 operations	1000000
Conformity	European Machinery Directive 2006/42/EC; EN 61508:2010, parts 1-7; EN 62061:2005; EN ISO 13849-1:2008; EN ISO 13849-2:2012; 60947-5-5:2005	

Smile 41 dimensions



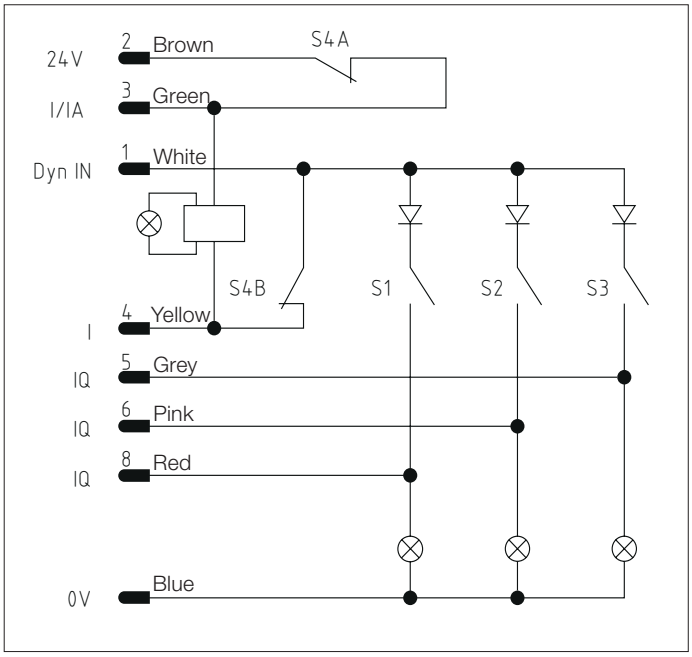
Note: All dimensions in mm

Electrical diagram for Smile 41 WWWWP



Note: Colours according to ABB Jokab Safety standard cables

Electrical diagram for Smile 41 EWWWP



Contact us

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www.abb.com/jokabsafety

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