sibalco

...connected with Technology

The Individual Standard

SIBALCO Smartline 1
Control devices with one actuator
Catalogue

Design and functionality. In Swiss quality.

![sibalco logo](...connected with Technology)

Sibalco Smartline 1
Overview

Sibalco Smartline 1
Introduction and explanations

7 steps to the product you're looking for:
Example: Command - Smartline 1 with selector switch, type 30FS 2 x 60°, latching, in a black housing, not illuminable, and a switching element with two normally closed contacts.

1. Select the type and design of actuator (selector RAFIX 30FS)

Type	Design	Page
Introduction and explanations		3
Emergency stop	RAFIX 22FS+	5
Push button	RAFIX 22FS+	6
	RAFIX 30FS+	9
Selector	RAFIX 22FS+	7
	RAFIX 30FS+	10
Key switch	RAFIX 22FS+	8
	RAFIX 30FS+	11

Sibalco Smartline 1
Introduction and explanations

2.	Choice of housing colour (black)
3.	Select the type of actuator (2 x 60° latching)
4.	Illumination with/without (without)
5.	Select the number of pins (4 pins)
6.	Select the wiring (standard wiring without illumination)
7.	Select the switching element (2 x normally closed contact)

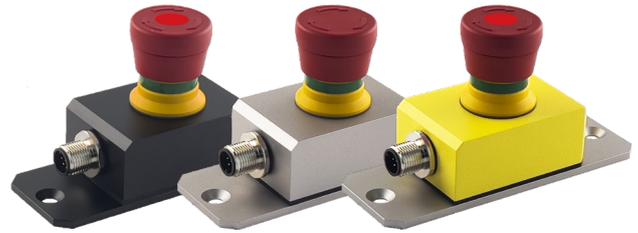| Series				Actuator				Illumination		Connector			Switching element	
	Colour			Type		Design				Pins	Pin assignment			
CAS	- B	black	13	- 02	Selector	0	1 x 90° V, latching (1.30.292.202/2200)	1	with	4	1	A	0	1 x normally opened (1.20.126.202/9000)
	C	colour-less				2	1 x 90° L, latching (1.30.292.102/2200)					A	1	1 x normally closed (1.20.126.201/9000)
						1	2 x 60°, latching (1.30.292.302/2200)	0	without	4	0	A B	2	2 x normally opened (1.20.126.205/9000)
						3	1 x 90°, momentary, 1 x 40°, latching (1.30.292.427/2200)					A B	3	2 x normally closed (1.20.126.204/9000)
												A B	4	1 x normally closed, 1 x normally opened (1.20.126.203/9000)
								1	with	8	1	A B	2	2 x normally opened (1.20.126.205/9000)
												A B	3	2 x normally closed (1.20.126.204/9000)
												A B	4	1 x normally closed, 1 x normally opened (1.20.126.203/9000)

Your item number: | CAS | - | B | 13 | - | 02 | 1 | 0 | 4 | 0 | 3 |

The item number for the selected example is: **CAS-B13-0210403**

Achtung:
Not all theoretical possibilities are available. The horizontal lines drawn must not be crossed. For example, item CAS-B13-0210803 is not available.

Sibalco Smartline 1
Emergency stop RAFIX 22FS+

Housing	Anodised or powder-coated aluminium
Connector	Industrial standard M12 connector, A coding
Switching voltage	max. 35V
Illumination	24V, 20mA

Series					Actuator				Illumination		Connector			Switching element	
	Colour				Type		Design				Pins	Pin assignment			
CAS	-	B	black	12	-	00	Emergency stop	0	Emergency stop, mushroom-head, red illuminable (1.30.273.011/2300)	1	with	8	1	A 1 2 / B 3 4 / C 5 6 / 8 7	6	2NC+1NO emergency stop (1.20.146.434/9000)
		C	colour-less					1	Emergency stop compact, illuminable (1.30.273.311/2300)	0	without	4	0	A 1 2 / B 3 4	5	2NC emergency stop (1.20.126.604/9000)
		Y	yellow							1	with	8	1	A 1 2 / B 3 4 / C 5 6 / 8 7		
								2	Emergency stop, mushroom-head (1.30.273.511/0300)	0	without	4	0	A 1 2 / B 3 4		

Your item number: CAS - [   ] 12 - 00 [ ][ ][ ][ ][ ]

Do you have any special requests for your Smartline 1? You will find all the options available starting on page 16.

Do you have any questions about the composition of the item number? - The instructions on page 3 may help you.

Sibalco Smartline 1
Push button RAFIX 22FS+

Housing	Anodised or powder-coated aluminium
Connector	Industrial standard M12 connector, A coding
Switching voltage	max. 35V
Illumination	24V, 20mA

Series					Actuator					Illumination		Connector			Switching element	
	Colour				Type		Design					Pins	Pin assignment			
CAS	- B	back	12	-	01	Push button	0	Push button FLEXLAB (1.30.270.921/2200)		0	without	4	0	A / B	2	2 x normally open (1.20.126.205/9000)
	C	colour-less													3	2 x normally closed (1.20.126.204/9000)
							1	Push button black opaque (1.30.270.021/0100)							4	1 x normally closed, 1 x normally open (1.20.126.203/9000)
							2	Push button white translucent (1.30.270.021/2200)		1	with	4	1	A	0	1 x normally open (1.20.126.202/9000)
							3	Push button red translucent (1.30.270.021/2300)							7	1 x normally open Micon short stroke (1.14.005.111/0000)
															1	1 x normally closed (1.20.126.201/9000)
							4	Push button yellow translucent (1.30.270.021/2400)				8	1	A / B	2	2 x normally open (1.20.126.205/9000)
							5	Push button green translucent (1.30.270.021/2500)							3	2 x normally closed (1.20.126.204/9000)
							6	Push button blue translucent (1.30.270.021/2600)							4	1 x normally closed, 1 x normally open (1.20.126.203/9000)

Your item number: CAS - ☐ 12 - 01 ☐ ☐ ☐ ☐

Do you have any special requests for your Smartline 1? You will find all the options available starting on page 16.

Do you have any questions about the composition of the item number? - The instructions on page 3 may help you.

Sibalco Smartline 1
Selector RAFIX 22FS+

Housing	Anodised or powder-coated aluminium
Connector	Industrial standard M12 connector, A coding
Switching voltage	max. 35V
Illumination	24V, 20mA

Series				Actuator				Illumination		Connector			Switching element	
	Colour			Type		Design				Pins	Pin assignment			
CAS	- B	black	12	- 02	Selector	0	1 x 90° V, latching (1.30.272.202/2200)	1	with	4	1	A	0	1 x normally open (1.20.126.202/9000)
	C	colour-less				2	1 x 90° L, latching (1.30.272.102/2200)					A	1	1 x normally closed (1.20.126.201/9000)
						1	2 x 60° V, latching (1.30.272.302/2200)	0	without	4	0	A B	2	2 x normally open (1.20.126.205/9000)
						3	1 x 90° momentary, 1 x 40° latching (1.30.272.427/2200)					A B	3	2 x normally closed (1.20.126.204/9000)
												A B	4	1 x normally closed, 1 x normally open (1.20.126.203/9000)
								1	with	8	1	A B	2	2 x normally open (1.20.126.205/9000)
												A B	3	2 x normally closed (1.20.126.204/9000)
												A B	4	1 x normally closed, 1 x normally open (1.20.126.203/9000)

Your item number: CAS - [   ] 12 - 02 [   ][   ][   ][   ][   ]

Do you have any special requests for your Smartline 1? You will find all the options available starting on page 16.

Do you have any questions about the composition of the item number? - The instructions on page 3 may help you.

Sibalco Smartline 1
Key switch RAFIX 22FS+

Housing	Anodised or powder-coated aluminium
Connector	Industrial standard M12 connector, A coding
Switching voltage	max. 35V
Illumination	24V, 20mA

* Illuminated options are only used to ensure connection compatibility with selectors.

Series				Actuator			Illumination		Connector		Switching element	
	Colour			Type		Design			Pins	Pin assignment		
CAS -	B	black	12 -	03	Key switch	0	1 x 90° V, latching removal position 0+1 (1.30.275.322/0000)	1	without *	4	1	A [1 4 / 2 3]	0	1 x normally open (1.20.126.202/9000)
	C	colour-less				2	1 x 90° V, latching removal position 0 (1.30.275.302/0000)					A [1 4 / 2 3]	1	1 x normally closed (1.20.126.201/9000)
						3	1 x 90° L, latching removal position 0 (1.30.275.202/0000)							
						4	1 x 90° L, latching removal position 0+1 (1.30.275.222/0000)							
						1	2 x 90°, latching removal position 0+1+2 (1.30.275.432/0000)	0	without	4	0	A [1 2] B [3 4]	2	2 x normally open (1.20.126.205/9000)
						5	2 x 90°, latching removal position 0 (1.30.275.402/0000)					A [1 2] B [3 4]	3	2 x normally closed (1.20.126.204/9000)
												A [1 2] B [3 4]	4	1 x normally closed, 1 x normally open (1.20.126.203/9000)
								1	without *	8	1	A [1 2] B [3 4] [8 7]	2	2 x normally open (1.20.126.205/9000)
												A [1 2] B [3 4] [8 7]	3	2 x normally closed (1.20.126.205/9000)
												A [1 2] B [3 4] [8 7]	4	1 x normally closed, 1 x normally open (1.20.126.203/9000)

Your item number: CAS - [ ] 12 - 03 [ ][ ][ ][ ][ ]

Do you have any special requests for your Smartline 1? You will find all the options available starting on page 16.

Do you have any questions about the composition of the item number? - The instructions on page 3 may help you.

Sibalco Smartline 1
Push button RAFIX 30FS+

Housing	Anodised or powder-coated aluminium
Connector	Industrial standard M12 connector, A coding
Switching voltage	max. 35V
Illumination	24V, 20mA

Series				Actuator				Illumination		Connector			Switching element	
	Colour			Type		Design				Pins	Pin assignment			
CAS	B	black	13	01	Push button	0	Push button FLEXLAB (1.30.290.921/0000)	0	without	4	0	A 1-2 B 3-4	2	2 x normally open (1.20.126.205/9000)
	C	colour-less										A 1-2 B 3-4	3	2 x normally closed (1.20.126.204/9000)
						1	Push button with ring illumination transparent (1.30.290.121/0000)					A 1-2 B 3-4	4	1 x normally closed, 1 x normally open (1.20.126.203/9000)
						2	Push button with ring illumination red (1.30.290.121/2300)	1	with	4	1	A 1-4 2-3	0	1 x normally open (1.20.126.202/9000)
						3	Push button with ring illumination yellow (1.30.290.121/2400)					A 1-4 2-3	7	1 x normally open Micon short stroke (1.14.005.111/0000)
												A 1-4 2-3	1	1 x normally closed (1.20.126.201/9000)
						4	Push button with ring illumination green (1.30.290.121/2500)			8	1	A 1-2 B 3-4 8-7	2	2 x normally open (1.20.126.205/9000)
						5	Push button with ring illumination blue (1.30.290.121/2600)					A 1-2 B 3-4 8-7	3	2 x normally closed (1.20.126.204/9000)
												A 1-2 B 3-4 8-7	4	1 x normally closed, 1 x normally open (1.20.126.203/9000)

Your item number: CAS - ☐ 13 - 01 ☐ ☐ ☐ ☐ ☐

Do you have any special requests for your Smartline 1? You will find all the options available starting on page 16.

Do you have any questions about the composition of the item number? - The instructions on page 3 may help you.

Sibalco Smartline 1
Selector RAFIX 30FS+

Housing	Anodised or powder-coated aluminium
Connector	Industrial standard M12 connector, A coding
Switching voltage	max. 35V
Illumination	24V, 20mA

| Series					Actuator				Illumination		Connector			Switching element	
	Colour			Type		Design					Pins	Pin assignment			
CAS	-	B	black	13	-	02	Selector	0	1 x 90° V, latching (1.30.292.202/2200)	1	with	4	1	A	0	1 x normally open (1.20.126.202/9000)
		C	colour-less					2	1 x 90° L, latching (1.30.292.102/2200)					A	1	1 x normally closed (1.20.126.201/9000)
								1	2 x 60°, latching (1.30.292.302/2200)	0	without	4	0	A B	2	2 x normally open (1.20.126.205/9000)
								3	1 x 90°, momentary, 1 x 40°, latching (1.30.292.427/2200)					A B	3	2 x normally closed (1.20.126.204/9000)
														A B	4	1 x normally closed, 1 x normally open (1.20.126.203/9000)
										1	with	8	1	A B	2	2 x normally open (1.20.126.205/9000)
														A B	3	2 x normally closed (1.20.126.204/9000)
														A B	4	1 x normally closed, 1 x normally open (1.20.126.203/9000)

Your item number: CAS - ☐ 13 - 02 ☐ ☐ ☐ ☐ ☐

Do you have any special requests for your Smartline 1? You will find all the options available starting on page 16.

Do you have any questions about the composition of the item number? - The instructions on page 3 may help you.
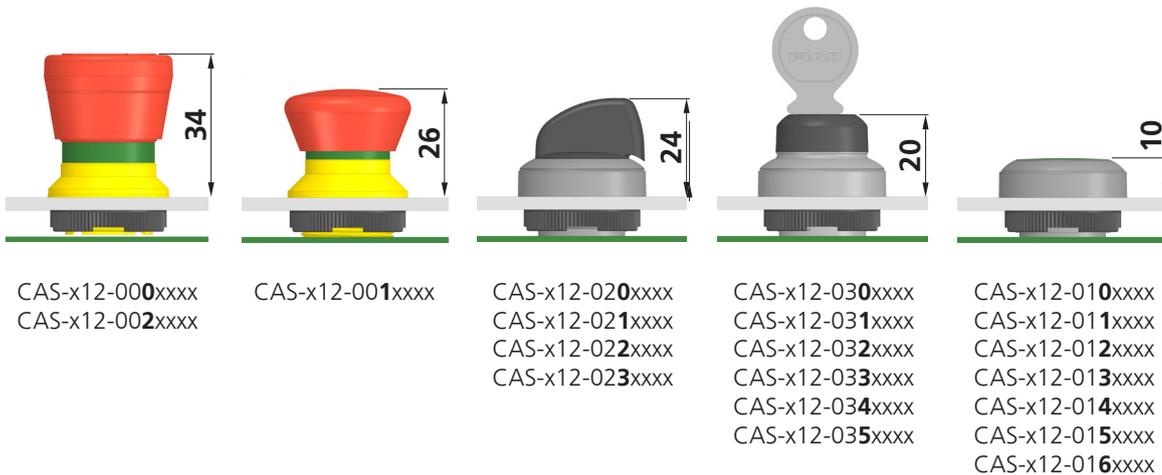
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Sibalco Smartline 1
Key switch RAFIX 30FS+

Housing	Anodised or powder-coated aluminium
Connector	Industrial standard M12 connector, A coding
Switching voltage	max. 35V
Illumination	24V, 20mA

* Illuminated options are only used to ensure connection compatibility with selectors.

Series				Actuator				Illumination		Connector		Switching element	
	Colour			Type		Design				Pins	Pin assignment		
CAS	B	black	13	- 03	Key switch	0	1 x 90° V, latching removal position 0+1 (1.30.295.322/0000)	1	without *	4	1	A	0	1 x normally open (1.20.126.202/9000)
	C	colour-less				2	1 x 90° V, latching removal position 0 (1.30.295.302/0000)					A	1	1 x normally closed (1.20.126.201/9000)
						3	1 x 90° L, latching removal position 0 (1.30.295.202/0000)							
						4	1 x 90° L, latching removal position 0+1 (1.30.295.222/0000)							
						1	2 x 90°, latching removal position 0+1+2 (1.30.295.432/0000)	0	without	4	0	A B	2	2 x normally open (1.20.126.205/9000)
						5	2 x 90°, latching removal position 0 (1.30.295.402/0000)					A B	3	2 x normally closed (1.20.126.204/9000)
												A B	4	1 x normally closed, 1 x normally open (1.20.126.203/9000)
								1	without *	8	1	A B	2	2 x normally open (1.20.126.205/9000)
												A B	3	2 x normally closed (1.20.126.204/9000)
												A B	4	1 x normally closed, 1 x normally open (1.20.126.203/9000)

Your item number: CAS - [   ] 13 - 03 [   ][   ][   ][   ][   ]

Do you have any special requests for your Smartline 1? You will find all the options available starting on page 16.

Do you have any questions about the composition of the item number? - The instructions on page 3 may help you.

Sibalco Smartline 1
Mechanical specifications for all series

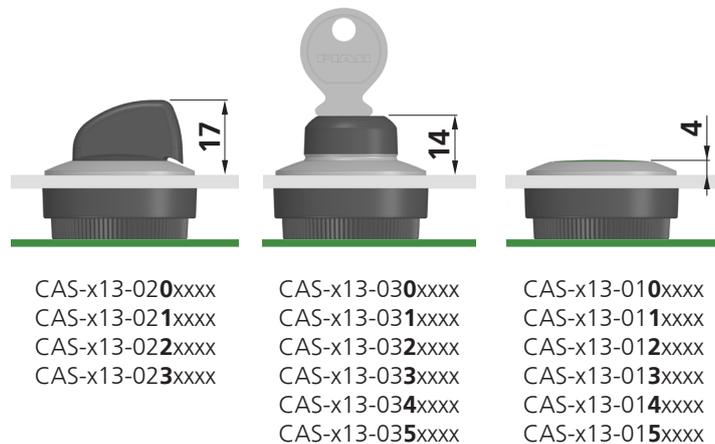**External dimensions of the housing without actuator height**
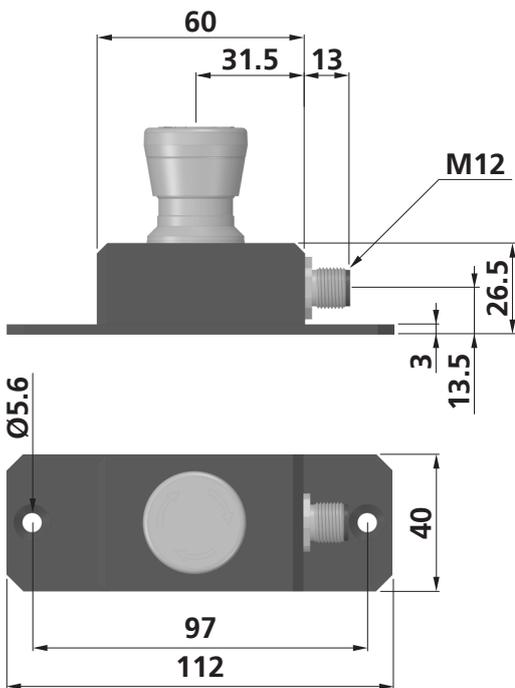
Sibalco Smartline 1
Mechanical specifications for all series

## Construction height of RAFIX 22FS+ series actuator (CAS-x12-xxxxxxx)

CAS-x12-00**0**xxxx CAS-x12-00**2**xxxx	CAS-x12-00**1**xxxx	CAS-x12-02**0**xxxx CAS-x12-02**1**xxxx CAS-x12-02**2**xxxx CAS-x12-02**3**xxxx	CAS-x12-03**0**xxxx CAS-x12-03**1**xxxx CAS-x12-03**2**xxxx CAS-x12-03**3**xxxx CAS-x12-03**4**xxxx CAS-x12-03**5**xxxx	CAS-x12-01**0**xxxx CAS-x12-01**1**xxxx CAS-x12-01**2**xxxx CAS-x12-01**3**xxxx CAS-x12-01**4**xxxx CAS-x12-01**5**xxxx CAS-x12-01**6**xxxx

Construction height of RAFIX 30FS+ series actuator (CAS-x13-xxxxxxx)

CAS-x13-02**0**xxxx CAS-x13-02**1**xxxx CAS-x13-02**2**xxxx CAS-x13-02**3**xxxx	CAS-x13-03**0**xxxx CAS-x13-03**1**xxxx CAS-x13-03**2**xxxx CAS-x13-03**3**xxxx CAS-x13-03**4**xxxx CAS-x13-03**5**xxxx	CAS-x13-01**0**xxxx CAS-x13-01**1**xxxx CAS-x13-01**2**xxxx CAS-x13-01**3**xxxx CAS-x13-01**4**xxxx CAS-x13-01**5**xxxx

Housing: anodised or powder-coated aluminium

Code	Colour	Surface treatment	Example of surface
CAS-B1x-xxxxxxx	black	anodised	
CAS-C1x-xxxxxxx	colourless	anodised	
CAS-Y1x-xxxxxxx	yellow	powder-coated	
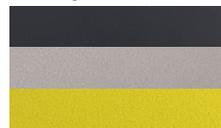
Sibalco Smartline 1
Electrical specifications for all series

General specifications

Switching voltage   max. 35V
Illumination   24V, 20 mA
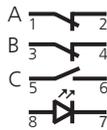
Description of emergency stop connections

M12 - 4-pin, configuration 0 (CAS-x12-x0x040x)

Pol	Function
1	normally closed (NC) A
2	normally closed (NC) A
3	normally closed (NC) B
4	normally closed (NC) B
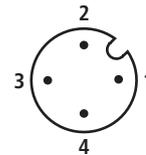
M12 - 8-pin, configuration 1 (CAS-x12-x0xx81x)

Pol	Function
1	normally closed (NC) A
2	normally closed (NC) A
3	normally closed (NC) B
4	normally closed (NC) B
5	normally open (NO) C [2]
6	normally open (NO) C [2]
7	illumination cathode [3]
8	illumination anode [3]
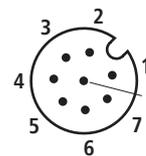
2) Only applicable with the corresponding switching element (CAS-xxx-xxxxxx6), otherwise not connected.
3) Applicable only if illuminated (CAS-xxx-xxx1xxx), otherwise not connected.
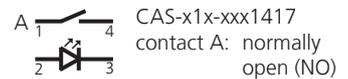
Description of connections (without emergency stop)

M12 - 4-pin, configuration 0 (CAS-x1x-xxx040x)

Pol	Function
1	contact A
2	contact A
3	contact B
4	contact B

CAS-x1x-xxx0402
contact A: normally open (NO)
contact B: normally open (NO)

CAS-x1x-xxx0403
contact A: normally closed (NC)
contact B: normally closed (NC)

CAS-x1x-xxx0404
contact A: normally open (NO)
contact B: normally closed (NC)
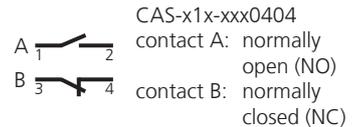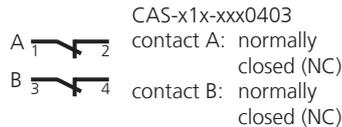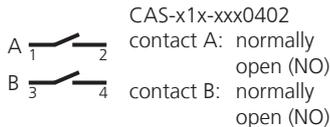
M12 - 4-pin, configuration 1 (CAS-x1x-xxx141x)

Pol	Function
1	contact A
2	illumination anode
3	illumination cathode
4	contact A

CAS-x1x-xxx1410
contact A: normally open (NO)

CAS-x1x-xxx1411
contact A: normally closed (NC)

CAS-x1x-xxx1417
contact A: normally open (NO)

M12 - 8-pin, configuration 1 (CAS-x1x-xxx181x)

Pol	Function
1	contact A
2	contact A
3	contact B
4	contact B
5	not connected
6	not connected
7	illumination cathode
8	illumination anode

CAS-x1x-xxx1812
contact A: normally open (NO)
contact B: normally open (NO)

CAS-x1x-xxx1813
contact A: normally closed (NC)
contact B: normally closed (NC)

CAS-x1x-xxx1814
contact A: normally open (NO)
contact B: normally closed (NC)
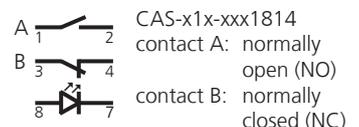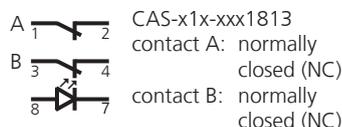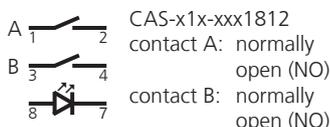
Sibalco Smartline 1
Standard accessories

You will find suitable M12 connection cables in our standard range, available in various lengths and versions.

Isolation	Length	straight		angled	
		4 Pol	8 Pol	4 Pol	8 Pol
PVC	2m	1200.04.002.0200	1200.08.004.0200	1205.04.002.0200	1205.08.004.0200
	5m	1200.04.002.0500	1200.08.004.0500	1205.04.002.0500	1205.08.004.0500
	10m	1200.04.002.1000	1200.08.004.1000	1205.04.002.1000	1205.08.004.1000
PUR	2m	1200.04.301.0200	1200.08.303.0200	1205.04.301.0200	1205.08.303.0200
	5m	1200.04.301.0500	1200.08.303.0500	1205.04.301.0500	1205.08.303.0500
	10m	1200.04.301.1000	1200.08.303.1000	1205.04.301.1000	1205.08.303.1000

Sibalco Smartline 1
Customised modifications

The Smartline series offers a wide range of modification options. Each control unit can be precisely tailored to your technical application, corporate identity and control logic.

1. Individual switching elements

If the desired switching element is not available in our standard range, we produce customer-specific options, such as digital encoders, analogue potentiometers or USB feed-throughs, etc.
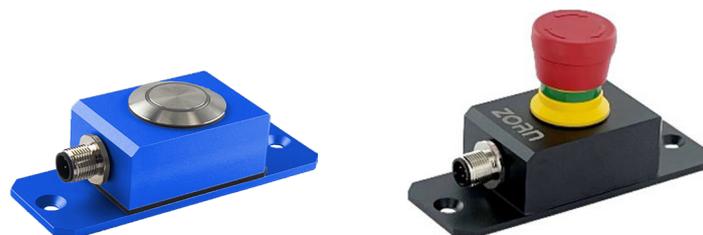
2. Precise labelling

We engrave or mark push buttons and surfaces exactly according to your specifications: durably, clearly and legibly.

3. Housing colours and marking

Upon request, we can deliver the case in your company colours and incorporate your logo in the designated location, in perfect harmony with your visual identity.

Sibalco Smartline 1
Customised modifications

4. Variants with multiple actuation positions

If you require more operating functions, the Smartline offers variants with 2, 3, 4, 6 actuators.
With SIBALCO Frontline we provide front panels for Industrial PCs or individual front panels.

5. Special form factors

Do you require a different geometry or a specific mechanical structure? We develop customised mechanical and electrical solutions.

6. Connection cables

We supply ready-to-go connection cables in various lengths and versions, perfectly suited to your application.

Sibalco Smartline 1
Individual solutions for every application

Whether for mechanical engineering, robotics, medical technology or special plant construction: the Smartline series can be flexibly adapted to your technical requirements.

Your benefits at a glance

- Wide variety of variants thanks to modular components
- Mechanical and electrical adaptations possible
- Precise laser markings and branding options
- Short delivery times for standard and customised solutions
- Multiple variants available: Smartline 2, 3, 4, 6 and Frontline
- Suitable connection cables from a single source

SIBALCO Command Overview

Smartline	Frontline	Customline	RAMO	E-BOX
CAS Smartline Standard	**CFS** Frontline Standard		RAMO Standard	RAMO Standard
CAI Smartline Individual	**CFI** Frontline Individual	**CCI** Customline Individual		**E-BOX XL** IO-Link

Company information

Sibalco Ltd.

Birmannsgasse 8
P.O. Box
CH-4055 Basel
Switzerland

Phone   +41 (0)61 264 10 10
E-Mail   **info@sibalco.ch**

Website   **www.sibalco.ch**

sibalco.ch

Sibalco Command