

### 4.3.5 Mushroom pushbuttons

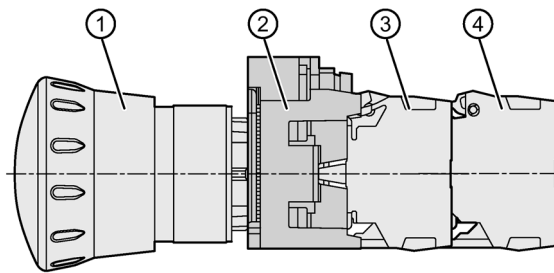
Mushroom pushbuttons are used to actuate contact modules. Their large, easily accessible button surface makes them easy to operate with the whole palm of the hand. By pressing or pulling these buttons, it is possible to generate up to 3 signals with just a single device.

They are available with actuators in diameter 30 mm, 40 mm or 60 mm.

Mushroom pushbuttons are available in different variants according to the following features:

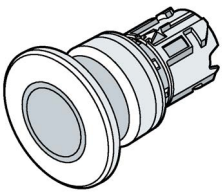
- Collar and front ring material
- Color of actuators
- Switching functions: latching / momentary contact
- Switch positions 2 (all mushroom pushbuttons) or 3 positions (only mushroom pushbuttons in diameter 40 mm)

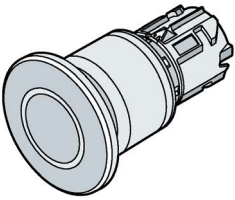
For further information, refer to Chapter "Mounting (Page 110)".

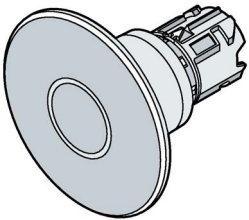


- ① Actuating element (here: EMERGENCY STOP mushroom pushbutton)
- ② Holder
- ③ Module 1
- ④ Module 2

## Overview of mushroom pushbuttons

 <p>Typical diagram</p>		<b>Diameter 30 mm</b>	
		Latching (pull to unlatch)	Momentary contact
<b>Collar / Front ring material</b>	<b>Switch positions</b>	<b>Article number</b>	
<b>Plastic / Plastic</b>			
Siemens Industry Mall ( <a href="http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221478">http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221478</a> )			
• Black	2-position	3SU1000-1AA10-0AA0	3SU1000-1AD10-0AA0
• Red	2-position	3SU1000-1AA20-0AA0	3SU1000-1AD20-0AA0
• Yellow	2-position	3SU1000-1AA30-0AA0	3SU1000-1AD30-0AA0
• Green	2-position	—	3SU1000-1AD40-0AA0
<b>Plastic / Metal, matte</b>			
Siemens Industry Mall ( <a href="http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10226614">http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10226614</a> )			
• Black	2-position	3SU1030-1AA10-0AA0	3SU1030-1AD10-0AA0
• Red	2-position	3SU1030-1AA20-0AA0	3SU1030-1AD20-0AA0
• Yellow	2-position	—	3SU1030-1AD30-0AA0
• Green	2-position	—	3SU1030-1AD40-0AA0
<b>Metal / Metal</b>			
Siemens Industry Mall ( <a href="http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221477">http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221477</a> )			
• Black	2-position	3SU1050-1AA10-0AA0	3SU1050-1AD10-0AA0
• Red	2-position	3SU1050-1AA20-0AA0	3SU1050-1AD20-0AA0
• Yellow	2-position	—	3SU1050-1AD30-0AA0
• Green	2-position	—	3SU1050-1AD40-0AA0

 <p>Typical diagram</p>		<b>Diameter 40 mm</b>	
		Latching (pull to unlatch)	Momentary contact
<b>Collar / Front ring material</b>	<b>Switch positions</b>	<b>Article number</b>	
<b>Plastic / Plastic</b>			
Siemens Industry Mall ( <a href="http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221478">http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221478</a> )			
• Black	2-position	3SU1000-1BA10-0AA0	3SU1000-1BD10-0AA0
• Red	2-position	3SU1000-1BA20-0AA0	3SU1000-1BD20-0AA0
• Yellow	2-position	3SU1000-1BA30-0AA0	3SU1000-1BD30-0AA0
• Green	2-position	3SU1000-1BA40-0AA0	3SU1000-1BD40-0AA0
<b>Plastic / Metal, matte</b>			
Siemens Industry Mall ( <a href="http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10226614">http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10226614</a> )			
• Black	2-position	3SU1030-1BA10-0AA0	3SU1030-1BD10-0AA0
• Red	2-position	3SU1030-1BA20-0AA0	3SU1030-1BD20-0AA0
• Yellow	2-position	3SU1030-1BA30-0AA0	3SU1030-1BD30-0AA0
• Green	2-position	3SU1030-1BA40-0AA0	3SU1030-1BD40-0AA0
<b>Metal / Metal</b>			
Siemens Industry Mall ( <a href="http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221477">http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221477</a> )			
• Black	2-position	3SU1050-1BA10-0AA0	3SU1050-1BD10-0AA0
	3-position	3SU1050-1EA20-0AA0	3SU1050-1ED10-0AA0
• Red	2-position	3SU1050-1BA20-0AA0	3SU1050-1BD20-0AA0
	3-position	3SU1050-1EA20-0AA0	3SU1050-1ED20-0AA0
• Yellow	2-position	3SU1050-1BA30-0AA0	3SU1050-1BD30-0AA0
• Green	2-position	3SU1050-1BA40-0AA0	3SU1050-1BD40-0AA0

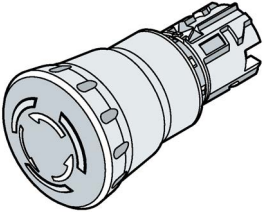
 <p>Typical diagram</p>	<b>Diameter 60 mm</b>		
	Latching (pull to unlatch)		Momentary contact
<b>Collar / Front ring material</b>	<b>Switch positions</b>	<b>Article number</b>	
<b>Plastic / Plastic</b>			
Siemens Industry Mall ( <a href="http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221478">http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221478</a> )			
• Black	2-position	3SU1000-1CA10-0AA0	3SU1000-1CD10-0AA0
• Red	2-position	3SU1000-1CA20-0AA0	3SU1000-1CD20-0AA0
• Yellow	2-position	—	3SU1000-1CD30-0AA0
• Green	2-position	—	3SU1000-1CD40-0AA0
<b>Plastic / Metal, matte</b>			
Siemens Industry Mall ( <a href="http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221478">http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221478</a> )			
• Black	2-position	3SU1030-1CA10-0AA0	3SU1030-1CD10-0AA0
• Red	2-position	3SU1030-1CA20-0AA0	3SU1030-1CD20-0AA0
• Yellow	2-position	—	3SU1030-1CD30-0AA0
• Green	2-position	—	3SU1030-1CD40-0AA0
<b>Metal / Metal</b>			
Siemens Industry Mall ( <a href="http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221477">http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221477</a> )			
• Black	2-position	3SU1050-1CA10-0AA0	3SU1050-1CD10-0AA0
• Red	2-position	3SU1050-1CA20-0AA0	3SU1050-1CD20-0AA0
• Yellow	2-position	—	3SU1050-1CD30-0AA0
• Green	2-position	—	3SU1050-1CD40-0AA0

### 4.3.6 Special variants of mushroom pushbuttons

These mushroom pushbuttons have a tamper-proof latching function.

For further information refer to Chapter "Installation (Page 110)". Please also note the information (on equipping) in Chapter "3SU14 contact modules and LED modules (Page 165)".

#### Overview of special variants of mushroom pushbuttons

 <p>Typical diagram</p>	
<b>Collar / Front ring material</b>	<b>Article number</b>
<b>Plastic / Plastic</b>	
Siemens Industry Mall ( <a href="http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221479">http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221479</a> )	
<ul style="list-style-type: none"> <li>• Black</li> </ul>	3SU1000-1HB10-0AA0
<ul style="list-style-type: none"> <li>• Blue</li> </ul>	3SU1000-1HB50-0AA0
<b>Metal / Metal</b>	
Siemens Industry Mall ( <a href="http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221480">http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221480</a> )	
<ul style="list-style-type: none"> <li>• Black</li> </ul>	3SU1050-1HB10-0AA0
	3SU1050-1HU10-0AA0
<ul style="list-style-type: none"> <li>• Yellow</li> </ul>	3SU1050-1HB30-0AA0

### **4.3.7 Illuminated mushroom pushbuttons**

Illuminated mushroom pushbuttons are used to actuate contact modules and can also function as display devices by means of an LED module. Their large, easily accessible button surface makes them easy to operate with the whole palm of the hand. By pressing or pulling these buttons, it is possible to generate up to 3 signals with just a single device.

They are available with actuators in diameter 30 mm, 40 mm or 60 mm.

Illuminated pushbuttons are available in different variants according to the following features:

- Collar and front ring material
- Color of actuators
- Switching functions: latching / momentary contact
- Switch positions: 2 (all illuminated mushroom pushbuttons) or 3 positions (only illuminated mushroom pushbuttons in diameter 40 mm)
- Illumination

For further information refer to Chapter "Mounting (Page 110)"

**Overview of illuminated mushroom pushbuttons**

		Diameter 30 mm	
		Latching (pull to unlatch)	Momentary contact
Collar / Front ring material	Switch positions	Article number	
<b>Plastic / Plastic</b>			
Siemens Industry Mall ( <a href="http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221478">http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221478</a> )			
• Red	2-position	3SU1001-1AA20-0AA0	3SU1001-1AD20-0AA0
• Yellow	2-position	3SU1001-1AA30-0AA0	3SU1001-1AD30-0AA0
• Green	2-position	3SU1001-1AA40-0AA0	3SU1001-1AD40-0AA0
• Blue	2-position	3SU1001-1AA50-0AA0	3SU1001-1AD50-0AA0
• White	2-position	3SU1001-1AA60-0AA0	3SU1001-1AD60-0AA0
• Clear	2-position	—	3SU1001-1AD70-0AA0
<b>Plastic / Metal, matte</b>			
Siemens Industry Mall ( <a href="http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10226614">http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10226614</a> )			
• Red	2-position	3SU1031-1AA20-0AA0	3SU1031-1AD20-0AA0
• Yellow	2-position	3SU1031-1AA30-0AA0	3SU1031-1AD30-0AA0
• Green	2-position	3SU1031-1AA40-0AA0	3SU1031-1AD40-0AA0
• Blue	2-position	3SU1031-1AA50-0AA0	3SU1031-1AD50-0AA0
• White	2-position	3SU1031-1AD60-0AA0	3SU1031-1AD60-0AA0
• Clear	2-position	—	3SU1031-1AD70-0AA0
<b>Metal / Metal</b>			
Siemens Industry Mall ( <a href="http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221477">http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221477</a> )			
• Red	2-position	3SU1051-1AA20-0AA0	3SU1051-1AD20-0AA0
• Yellow		3SU1051-1AA30-0AA0	3SU1051-1AD30-0AA0
• Green	2-position	3SU1051-1AA40-0AA0	3SU1051-1AD40-0AA0
• Blue	2-position	3SU1051-1AA50-0AA0	3SU1051-1AD50-0AA0
• White	2-position	3SU1051-1AD60-0AA0	3SU1051-1AD60-0AA0
• Clear	2-position	—	3SU1051-1AD70-0AA0



		Diameter 40 mm	
		Latching (pull to unlatch)	Momentary contact
Collar / Front ring material	Switch positions	Article number	
<b>Plastic / Plastic</b>			
Siemens Industry Mall ( <a href="http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221478">http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221478</a> )			
• Red	2-position	3SU1001-1BA20-0AA0	3SU1001-1BD20-0AA0
• Yellow	2-position	3SU1001-1BA30-0AA0	3SU1001-1BD30-0AA0
• Green	2-position	3SU1001-1BA40-0AA0	3SU1001-1BD40-0AA0
• Blue	2-position	3SU1001-1BA50-0AA0	3SU1001-1BD50-0AA0
• White	2-position	3SU1001-1BA60-0AA0	3SU1001-1BD60-0AA0
• Clear	2-position	—	3SU1001-1BD70-0AA0
<b>Plastic / Metal, matte</b>			
Siemens Industry Mall ( <a href="http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10226614">http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10226614</a> )			
• Red	2-position	3SU1031-1BA20-0AA0	3SU1031-1BD20-0AA0
• Yellow	2-position	3SU1031-1BA30-0AA0	3SU1031-1BD30-0AA0
• Green	2-position	3SU1031-1BA40-0AA0	3SU1031-1BD40-0AA0
• Blue	2-position	3SU1031-1BA50-0AA0	3SU1031-1BD50-0AA0
• White	2-position	3SU1031-1BA60-0AA0	3SU1001-1BD60-0AA0
• Clear	2-position	—	3SU1031-1BD70-0AA0
<b>Metal / Metal</b>			
Siemens Industry Mall ( <a href="http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221477">http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221477</a> )			
• Red	2-position	3SU1051-1BA20-0AA0	3SU1051-1BD20-0AA0
	3-position	3SU1051-1EA20-0AA0	3SU1051-1ED20-0AA0
• Yellow		3SU1051-1BA30-0AA0	3SU1051-1BD30-0AA0
• Green	2-position	3SU1051-1BA40-0AA0	3SU1051-1BD40-0AA0
	3-position	3SU1051-1EA40-0AA0	—
• Blue	2-position	3SU1051-1BA50-0AA0	3SU1051-1BD50-0AA0
• White	2-position	3SU1051-1BA60-0AA0	3SU1051-1BD60-0AA0
	3-position	—	3SU1051-1ED60-0AA0
• Clear	2-position	—	3SU1051-1BD70-0AA0

		<b>Diameter 60 mm</b>	
		Latching (pull to unlatch)	Momentary contact
<b>Collar / Front ring material</b>	<b>Switch positions</b>	<b>Article number</b>	
<b>Plastic / Plastic</b>			
Siemens Industry Mall ( <a href="http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221478">http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221478</a> )			
• Black	2-position	3SU1001-1CA10-0AA0	3SU1001-1CD10-0AA0
• Red	2-position	3SU1001-1CA20-0AA0	3SU1001-1CD20-0AA0
• Yellow	2-position	—	3SU1001-1CD30-0AA0
• Green	2-position	—	3SU1001-1CD40-0AA0
<b>Plastic / Metal, matte</b>			
Siemens Industry Mall ( <a href="http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10226614">http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10226614</a> )			
• Black	2-position	3SU1031-1CA10-0AA0	3SU1031-1CD10-0AA0
• Red	2-position	3SU1031-1CA20-0AA0	3SU1031-1CD20-0AA0
• Yellow	2-position	—	3SU1031-1CD30-0AA0
• Green	2-position	—	3SU1031-1CD40-0AA0
<b>Metal / Metal</b>			
Siemens Industry Mall ( <a href="http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221477">http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221477</a> )			
• Black	2-position	3SU1051-1CA10-0AA0	3SU1051-1CD10-0AA0
• Red	2-position	3SU1051-1CA20-0AA0	3SU1051-1CD20-0AA0
• Yellow	2-position	—	3SU1051-1CD30-0AA0
• Green	2-position	—	3SU1051-1CD40-0AA0

### 4.3.8 EMERGENCY STOP mushroom pushbuttons

EMERGENCY STOP mushroom pushbuttons are devices for actuating contact modules, and they are used in conjunction with a safety relay to bring a machine / plant to a safe state.

The EMERGENCY STOP mushroom pushbuttons are equipped with tamper protection (trigger action). The EMERGENCY STOP mushroom pushbutton does not latch without generating an EMERGENCY STOP signal. The EMERGENCY STOP signal is maintained until the EMERGENCY STOP device is reset (unlatched).

All SIRIUS ACT EMERGENCY STOP mushroom pushbuttons comply with DIN EN ISO 13850.

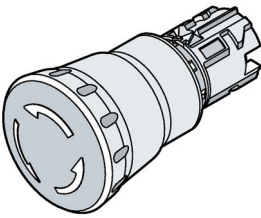
These pushbuttons are operated by pressure applied by the whole palm of the hand. EMERGENCY STOP mushroom pushbuttons are available with actuators in diameter 30 mm, 40 mm or 60 mm.

EMERGENCY STOP mushroom pushbuttons are available in different variants according to the following features:

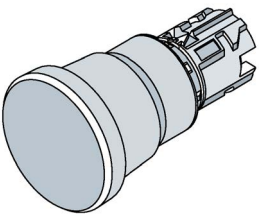
- Collar and front ring material
- Switching function: latching
- Illumination
- Rotate to unlatch
- Pull to unlatch
- Key-operated release (manipulation-proof)

For further information refer to Chapter "Installation (Page 110)". Please also note the information (on equipping) in Chapter "3SU14 contact modules and LED modules (Page 165)".

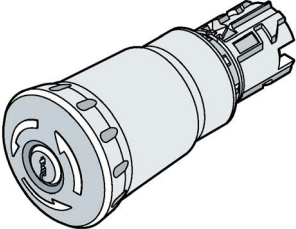
**Overview of EMERGENCY STOP mushroom pushbuttons, rotate-to-unlatch type**

 <p>Typical diagram</p>	Diameter 30 mm	Diameter 40 mm	Diameter 60 mm
	<b>Collar / Front ring material</b> <b>Article number</b>		
<b>Plastic / Plastic</b> Siemens Industry Mall ( <a href="http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221479">http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221479</a> )			
<ul style="list-style-type: none"> <li>Red</li> </ul>	3SU1000-1GB20-0AA0	3SU1000-1HB20-0AA0	3SU1000-1JB20-0AA0
<b>Metal / Metal</b> Siemens Industry Mall ( <a href="http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221480">http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221480</a> )			
<ul style="list-style-type: none"> <li>Red</li> </ul>	3SU1050-1GB20-0AA0	3SU1050-1HB20-0AA0	3SU1050-1JB20-0AA0

**Overview of EMERGENCY STOP mushroom pushbuttons, pull-to-unlatch type**

 <p>Typical diagram</p>	Diameter 40 mm
	<b>Collar / Front ring material</b> <b>Article number</b>
<b>Plastic / Plastic</b> Siemens Industry Mall ( <a href="http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221479">http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221479</a> )	
<ul style="list-style-type: none"> <li>Red</li> </ul>	3SU1000-1HA20-0AA0
<b>Metal / Metal</b> Siemens Industry Mall ( <a href="http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221480">http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221480</a> )	
<ul style="list-style-type: none"> <li>Red</li> </ul>	3SU1050-1HA20-0AA0

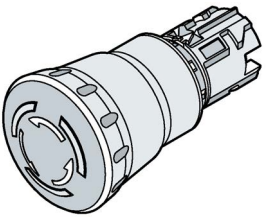
## Overview of EMERGENCY STOP mushroom pushbuttons, key-operated release (key-operated switch)

 <p>Typical diagram</p>		Diameter 40 mm
<b>Collar / Front ring material</b>	<b>Version</b>	<b>Article number</b>
<b>Plastic / Plastic</b>		
Siemens Industry Mall ( <a href="http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221479">http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221479</a> )		
<ul style="list-style-type: none"> <li>Red</li> </ul>	RONIS, SB30 RONIS, 455 CES, SSG10 CES, SSP9 CES, SMS1 BKS, S1 BKS, E7 <sup>1)</sup> BKS, E9 <sup>1)</sup> O.M.R 73037, red	3SU1000-1HF20-0AA0 3SU1000-1HG20-0AA0 3SU1000-1HR20-0AA0 3SU1000-1HS20-0AA0 3SU1000-1HT20-0AA0 3SU1000-1HK20-0AA0 3SU1000-1HM20-0AA0 3SU1000-1HN20-0AA0 3SU1000-1HQ20-0AA0
<b>Metal / Metal</b>		
Siemens Industry Mall ( <a href="http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221480">http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221480</a> )		
<ul style="list-style-type: none"> <li>Red</li> </ul>	RONIS, SB30 RONIS, 455 RONIS, 421 CES, SSG10 CES, SSP9 CES, VL5 CES, VL1 BKS, S1 BKS, E7 <sup>1)</sup> BKS, E9 <sup>1)</sup> O.M.R 73037, red IKON, 360012K1	3SU1050-1HF20-0AA0 3SU1050-1HG20-0AA0 3SU1050-1HH20-0AA0 3SU1050-1HR20-0AA0 3SU1050-1HS20-0AA0 3SU1050-1HU20-0AA0 3SU1050-1HV20-0AA0 3SU1050-1HK20-0AA0 3SU1050-1HM20-0AA0 3SU1050-1HN20-0AA0 3SU1050-1HQ20-0AA0 3SU1050-1HX20-0AA0
<ul style="list-style-type: none"> <li>Black</li> </ul>	CES, VL5	3SU1050-1HU10-0AA0

<sup>1)</sup> Key not included in the scope of supply

For further information about keys, please refer to paragraph "Special locks for key-operated switches" in Chapter "Key-operated switches 22.5" (Page 85).

Overview of illuminated EMERGENCY STOP mushroom pushbuttons

 <p>Typical diagram</p>	Diameter 30 mm	Diameter 40 mm	Diameter 60 mm
	<b>Collar / Front ring material</b> <b>Article number</b>		
<b>Plastic / Plastic</b> Siemens Industry Mall ( <a href="http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221479">http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221479</a> )			
<ul style="list-style-type: none"> <li>Red</li> </ul>	3SU1001-1GB20-0AA0	3SU1001-1HB20-0AA0	3SU1001-1JB20-0AA0
<b>Metal / Metal</b> Siemens Industry Mall ( <a href="http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221480">http://mall.industry.siemens.com/mall/en/en/Catalog/Products/10221480</a> )			
<ul style="list-style-type: none"> <li>Red</li> </ul>	3SU1051-1GB20-0AA0	3SU1051-1HB20-0AA0	3SU1051-1JB20-0AA0