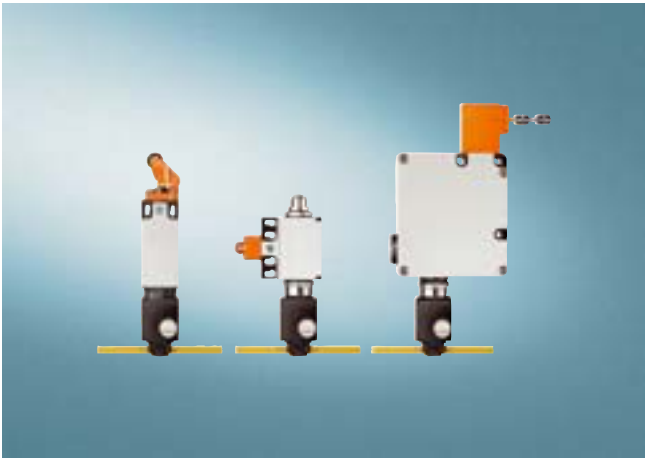


AS-Interface

AS-Interface Safety at work

AS-Interface position switch

Overview



Position switch from left to right:
Standard / Standard, with M12 connector / with tumbler

It is also possible now to directly connect SIGUARD position switches via the standard AS-Interface with safety-oriented communication. In this case, the safety functions no longer have to be conventionally wired up.

Position switches convert the mechanical positions of moving machine components into electrical signals.

Application

Position switch with separate actuator

The position switches with separate actuator are used in applications in which the position of doors, covers or guards has to be monitored for safety reasons.

The position switch can only be switched using the associated coded actuator. It is not possible to bypass it manually or using a tool.

Position switch with tumbler



The position switches with tumblers are special safety devices that prevent the inadvertent or intentional opening of protective doors, guards or other covers when a dangerous state exists, e.g. for coastdown movements of the switched-off machine.

The safety switch with tumbler has two main tasks:

- Enabling the machine when the protective device is closed and locked
- Disabling the machine when the protective device is open

The position switch can only be switched using the associated coded actuator. It is not possible to bypass it manually or using a tool.

Selection and Ordering data

Version	Order No.	Basic switch ¹⁾
General information All products of the Section <i>AS-Interface position switches</i> allow positive opening according to IEC 60 947-5-1, Appendix K		
AS-Interface position switches, standard via AS-Interface F adapter with direct AS-Interface connection to <i>Safety at Work</i> IP65		
 3SF3 200-6EV00-0BA1	<ul style="list-style-type: none"> • <i>Encapsulated in molded plastic</i>, EN 50 047, 31 mm wide, slow-action contact, two NC contacts <ul style="list-style-type: none"> - Rounded plungers - Roller plungers - Roller levers - Angular roller levers - Lock-and-release lever • <i>Encapsulated in moulded plastic</i>, EN 50 047, 31 mm wide, snap-action contact, one NC contact <ul style="list-style-type: none"> - Rounded plungers - Roller plungers - Roller levers - Angular roller levers - Lock-and-release lever 	<ul style="list-style-type: none"> 3SF3 200-6CV00-0BA1 3SE2 200-6C 3SF3 200-6DV00-0BA1 3SE2 200-6D 3SF3 200-6EV00-0BA1 3SE2 200-6E 3SF3 200-6FV00-0BA1 3SE2 200-6F 3SF3 200-6GV00-0BA1 3SE2 200-6G
 3SF3 120-6GW00-0BA1	<ul style="list-style-type: none"> • <i>With metal enclosure</i>, EN 50 041, 40 mm wide, slow-action contact, two NC contacts <ul style="list-style-type: none"> - Rounded plungers - Roller plungers - Roller levers - Angular roller levers - Lock-and-release lever • <i>With metal enclosure</i>, EN 50 041, 40 mm wide, snap-action contact, one NC contact <ul style="list-style-type: none"> - Rounded plungers - Roller plungers - Roller levers - Angular roller levers - Lock-and-release lever 	<ul style="list-style-type: none"> 3SF3 120-6CV00-0BA1 3SE2 120-6C 3SF3 120-6DV00-0BA1 3SE2 120-6D 3SF3 120-6EV00-0BA1 3SE2 120-6E 3SF3 120-6FV00-0BA1 3SE2 120-6F 3SF3 120-6GW00-0BA1 3SE2 120-6GW 3SF3 120-1CV00-0BA1 3SE2 120-1C 3SF3 120-1DV00-0BA1 3SE2 120-1D 3SF3 120-1EV00-0BA1 3SE2 120-1E 3SF3 120-1FV00-0BA1 3SE2 120-1F 3SF3 120-1GW00-0BA1 3SE2 120-1GW




1) Accessories, technical specifications, contact travel, switching diagrams and dimension drawings can be found for the basic switch in the Catalog LV 10, Edition 2004

AS-Interface

AS-Interface Safety at work

AS-Interface position switch

Selection and Ordering data (continued)

Version	Order No.	Basic switch ¹⁾												
 <p>3SF3 210-0DV00-0BA2</p> <p>AS-Interface position switch, standard, with M12 connector M12 connector for connecting an additional position switch Direct AS-Interface connection to <i>Safety at Work</i> can be used for up to Category 4 acc. to EN 954-1, IP65</p> <ul style="list-style-type: none"> • <i>Encapsulated in moulded plastic</i>, EN 50 047, 50 mm wide, slow-action contact, 1 NC contact <ul style="list-style-type: none"> - Rounded plungers - Roller plungers - Roller levers - Angular roller levers - Lock-and-release lever • <i>Encapsulated in moulded plastic</i>, EN 50 047, 50 mm wide, snap-action contact, one NC contact <ul style="list-style-type: none"> - Rounded plungers - Roller plungers - Roller levers - Angular roller levers - Lock-and-release lever 	<p>3SF3 210-0CV00-0BA2</p> <p>3SF3 210-0DV00-0BA2</p> <p>3SF3 210-0EV00-0BA2</p> <p>3SF3 210-0FV00-0BA2</p> <p>3SF3 210-0GV00-0BA2</p>	<p>3SE2 210-0C</p> <p>3SE2 210-0D</p> <p>3SE2 210-0E</p> <p>3SE2 210-0F</p> <p>3SE2 210-0G</p>												
 <p>3SF3 100-0EV00-0BA2</p> <ul style="list-style-type: none"> • <i>With metal enclosure</i>, EN 50 041, 56 mm wide, slow-action contact, 1 NC contact <ul style="list-style-type: none"> - Rounded plungers - Roller plungers - Roller levers - Angular roller levers - Lock-and-release lever • <i>With metal enclosure</i>, EN 50 041, 56 mm wide, snap-action contact, 1 NC contact <ul style="list-style-type: none"> - Rounded plungers - Roller plungers - Roller levers - Angular roller levers - Lock-and-release lever 	<p>3SF3 100-0CV00-0BA2</p> <p>3SF3 100-0DV00-0BA2</p> <p>3SF3 100-0EV00-0BA2</p> <p>3SF3 100-0FV00-0BA2</p> <p>3SF3 100-0GV00-0BA2</p>	<p>3SE2 100-0C</p> <p>3SE2 100-0D</p> <p>3SE2 100-0E</p> <p>3SE2 100-0F</p> <p>3SE2 100-0G</p>												
 <p>AS-Interface position switch, with separate actuator With direct AS-Interface connection to <i>Safety at Work</i> IP65, slow-action contact, 2 NC contacts</p> <ul style="list-style-type: none"> • <i>Encapsulated in moulded plastic</i>, lateral operation, fixing acc. to EN 50 047 • <i>Encapsulated in moulded plastic</i>, front end operation, fixing acc. to EN 50 047 • <i>Encapsulated in moulded plastic</i>, lateral and axial operation, 52 mm wide <ul style="list-style-type: none"> - Extraction force 30 N - Extraction force 5 N - Automatic ejection • <i>With metal enclosure</i>, fixing acc. to EN 50 041 	<p>3SF3 200-6XX03-0BA1</p> <p>3SF3 200-6XX04-0BA1</p>	<p>3SE2 200-6XX03</p> <p>3SE2 200-6XX04</p>												
<p>Actuator for "AS-Interface position switch, with separate actuator"</p> <ul style="list-style-type: none"> • For AS-Interface position switch, encapsulated in moulded plastic, 52 mm wide <table border="1"> <thead> <tr> <th>Type</th> <th>Enclosure width/length</th> <th>Order No.</th> </tr> </thead> <tbody> <tr> <td>Standard ($r_{\min} = 150$ mm)</td> <td>27 mm</td> <td>3SX3 218</td> </tr> <tr> <td>Universal radius ($r_{\min} = 45$ mm)</td> <td>33 mm</td> <td>3SX3 228</td> </tr> </tbody> </table>	Type	Enclosure width/length	Order No.	Standard ($r_{\min} = 150$ mm)	27 mm	3SX3 218	Universal radius ($r_{\min} = 45$ mm)	33 mm	3SX3 228					
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<ul style="list-style-type: none"> • For AS-Interface position switch metal enclosure, mounting to EN 50 041 <table border="1"> <thead> <tr> <th>Type</th> <th>Enclosure width/length</th> <th>Order No.</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>79 mm</td> <td>3SX3 197</td> </tr> <tr> <td>With transverse fixing</td> <td>50 mm</td> <td>3SX3 206</td> </tr> <tr> <td>Universal radius</td> <td>80 mm</td> <td>3SX3 203</td> </tr> </tbody> </table>	Type	Enclosure width/length	Order No.	Standard	79 mm	3SX3 197	With transverse fixing	50 mm	3SX3 206	Universal radius	80 mm	3SX3 203		
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1) Accessories, technical specifications, contact travel, switching diagrams and dimension drawings can be found for the basic switch in the Catalog LV 10, Edition 2004

AS-Interface

AS-Interface Safety at work

AS-Interface cable-operated switch

Overview



It is also possible to connect AS-Interface cable-operated switches via the standard AS-Interface with safety-oriented communication.

In this case, the safety functions no longer have to be conventionally wired up.

Application

SIGUARD cable-operated switches are used for monitoring or for EMERGENCY STOP facilities on particularly endangered system sections.

As the effective range of a cable-operated switch is only limited by the length of the pull-wire, large systems can also be protected.

Standards

Switches with latching for implementation in EMERGENCY STOP equipment correspond to the EN 418 standard.

Function

The safety contacts of the AS-Interface cable-operated switch are positively driven.

The AS-Interface cable-operated switches are ready to operate after pretensioning of the pull-wire or the rope.

When the rope is pretensioned, it must be released before the cable-operated switch can be returned to the original state.

Selection and Ordering data

Version	Order No.	Basic switch ¹⁾
General information All products of the Section <i>AS-Interface cable-operated switches</i> allow positive opening according to IEC 60 947-5-1, Appendix K		
AS-Interface cable-operated switches with direct AS-Interface connection to <i>Safety at Work</i> Metal housing with dust protection Can be used up to category 4 acc. to EN 954-1 IP65 Latching acc. to EN 418 Pushbutton unlatching 2 NC contacts		
<ul style="list-style-type: none"> For cable lengths up to 10 m, with adjustment window 	3SF2 120-1BF00-0BA1	<i>3SE7 120-1BF00</i>
<ul style="list-style-type: none"> For cable lengths up to 25 m, with adjustment window 	3SF2 150-1BF00-0BA1	<i>3SE7 150-1BF00</i>
<ul style="list-style-type: none"> For cable lengths up to 50 m 	3SF2 140-1BF00-0BA1	<i>3SE7 140-1BF00</i>



1) Accessories, technical specifications, contact travel, switching diagrams and dimension drawings can be found for the basic switch in the Catalog LV 10