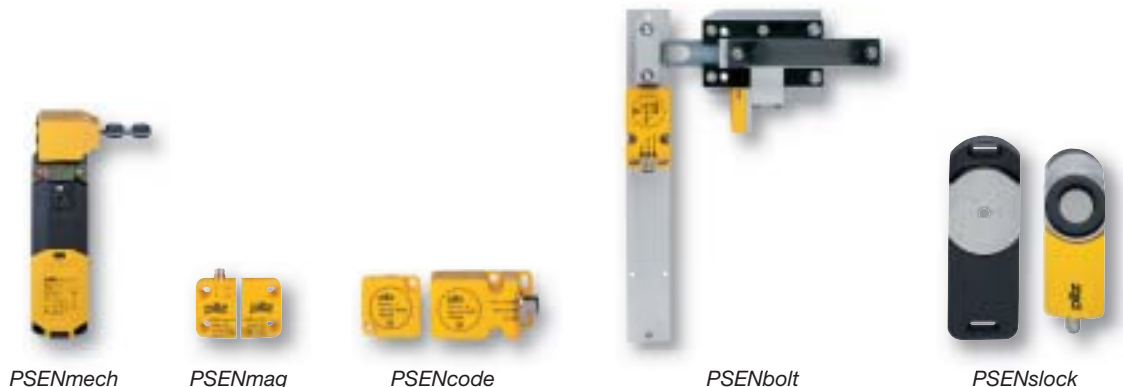




## ► Safety switches PSENmech, PSENmag, PSEN



### For safety gate and position monitoring

According to the standard EN 1088, hazardous machine movements must be stopped when a guard is opened and a restart must be prevented. It must not be possible to either defeat (VDE 060) or manipulate (EN 1088) these guards.

PSEN safety switches are particularly effective and economical in meeting these requirements. They are available with various designs and operating principles, can be used under difficult environmental conditions and can be connected in series. Choose the appropriate mechanical, magnetic or coded safety switch from Pilz!

### For each application ...

Mechanical safety switches are particularly suitable for applications in which the safety gate should not be opened unintentionally. More from page 12.

### Selection guide for PSEN safety switches and safety gate systems

Type	PSENmech	PSENmag	PSENcode	PSENbolt <sup>1)</sup>	PSSENSlock
Method	Mechanical	Non-contact, magnetic	Non-contact, coded	Mechanical	Non-contact, coded
Manipulation protection	Possible	Possible	Integrated	- <sup>2)</sup>	Integrated
Guard locking	With/without	-	-	-	Integrated
IP protection type	Up to IP65/IP67	IP67/IP69k	IP67	-	IP67
Harsh environmental conditions	Sensitive	Insensitive	Insensitive	Insensitive	Insensitive
Tolerance when guiding gates	Up to 0.5 mm	3 ... 8 mm	Up to 15 mm	- <sup>2)</sup>	Up to 5 mm

<sup>1)</sup> PSENbolt used with PSEN me1 and PSENcode

<sup>2)</sup> Depending on the safety switch that is used

# code and PSENbolt

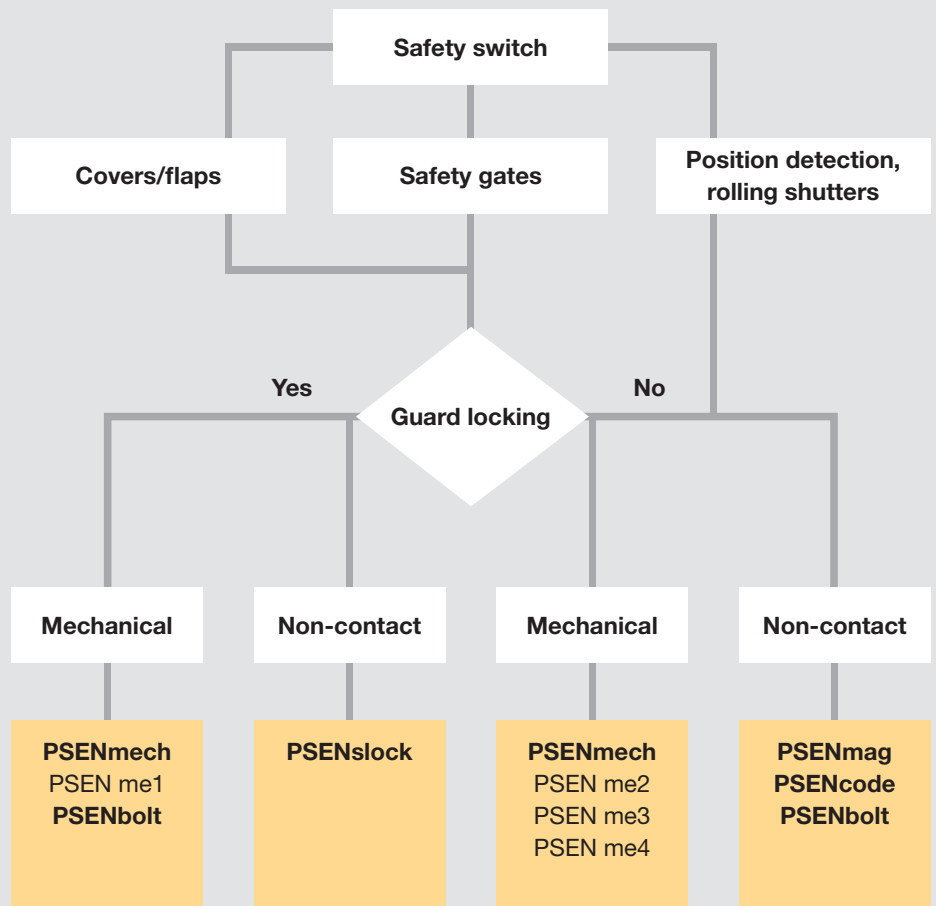
## ... the appropriate switch

PSENmag non-contact, magnetic safety switches can be used when the risk analysis specifies a high category, where there is heavy soiling or where strict hygiene regulations need to be met. More from page 16.

The highest level of protection against manipulation can be achieved using the non-contact, coded safety switches PSENcode; the enable is triggered when the actuating element is within the switch's response range and the code on the actuator matches that of the switch (key lock principle). More from page 22.

PSENbolt safety bolts are used in conjunction with safety switches and offer the best protection for safety gates that are difficult to adjust or in areas where safety gates are opened and closed frequently. More from page 24.

## Selection guide for safety gate applications and position detection



Keep up-to-date  
on safety switches  
PSEN:

 Webcode 0307

Online information  
at [www.pilz.com](http://www.pilz.com)



Applications and industries  
Safety switches PSENmech, PSENmag,  
PSENcode and PSENbolt

## ► Safety switches for every environment and

Why not fit Pilz safety switches!  
They are suitable for applications  
in classic mechanical engineering  
as well as sectors with rigorous  
hygiene requirements, such as  
the food, packaging or pharma-  
ceutical industry.

### **Enduring in use, proven many times over**

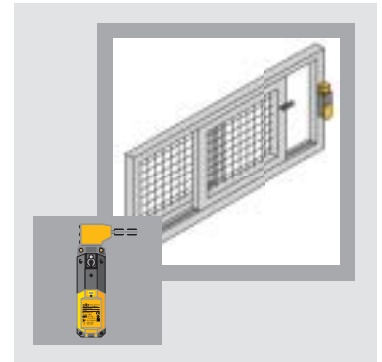
The PSEN housing is made from  
silicone-free PBT plastic, which is  
insensitive to dirt. It has a smooth  
surface with laser inscription and  
the housing material is resistant  
to many chemicals; also, PSEN  
safety switches are dust-tight  
and waterproof to comply with  
protection type IP69k.

### **Guard locking until the risk is averted**

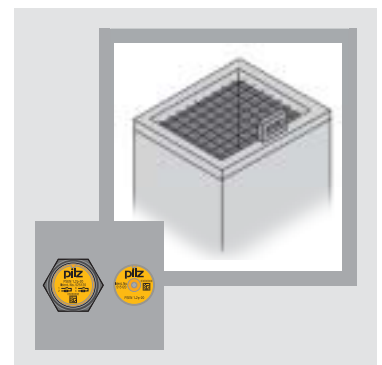
PSENmech mechanical safety  
switches with guard locking  
ensure that guards remain in  
the closed position until the  
hazardous movement, e.g. a  
main spindle overrun, has been  
brought to a standstill. In this way  
you can prevent the safety device  
from being opened inadvertently  
while a process is running.

### **Transponder technology for metal processing plant and machinery**

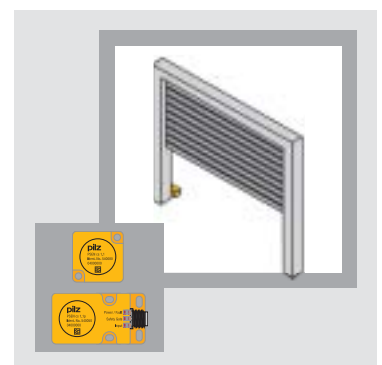
Thanks to the use of non-mag-  
netic technology, PSENcode  
non-contact, coded safety  
switches are ideal for metal  
processing plant and machinery.



*Monitoring a sliding gate  
with PSENmech.*



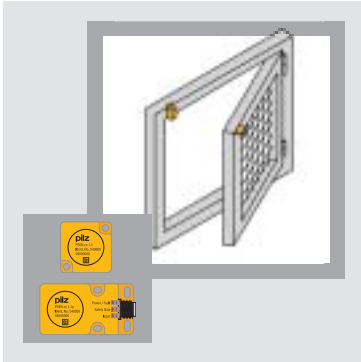
*Monitoring a flap with PSENmag.*



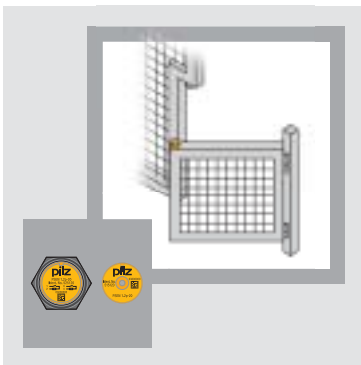
*Detecting the position and monitoring  
a rolling shutter with PSENcode.*



# application



Using the PSENcode to monitor a swing gate with large tolerances.



Monitoring a swing gate with PSENmag in an EX area.

## High level of safety – even in potentially explosive areas

PSENmag and PSENcode safety switches can also be used for applications in which potentially explosive atmospheres may arise due to gases or dust.

## Still functional – even when concealed

The installation of the safety switches PSENmag and PSENcode can be concealed. The PSENmag remains functional even when covered by non-magnetic materials.



## Application overview for PSEN safety switches

Application	Product			
	PSENmech	PSENmag	PSENcode	PSENslock
Cover	◆	◆	◆	-
Flap	◆	◆	◆	◆
Safety gate	◆	◆	◆	◆
Rolling shutters	-	◆	◆	-
Position detection	-	◆	◆	-