

Teleson



IDEM Safety Switches E-book

A guide for engineers, purchasers and maintenance managers on (stainless steel & IP69K) safety switches.

Reliability in the Harshest Conditions

Anyone working in food processing, pharmaceuticals or heavy industry knows the challenges: moisture, chemicals and high pressure are the enemies of machine safety. Working with IDEM Safety Switches means choosing the highest standard in stainless steel and IP69K. But making the right choices in the world of machine safety and ensuring these specialist components are available when needed, requires insight. This e-book helps you navigate that landscape with confidence.

As a specialised distributor, we bring the British quality of IDEM Safety Switches to Europe. We give you clear insight into how to intelligently balance technology and logistics: from selecting the right safety switch to setting up inventory management for critical components. Practical, technically substantiated and focused on maximum uptime. And if questions remain, we are always available to support you.

Table of Contents

Teleson & IDEM: A Strategic Partnership	3
Lead Times & Inventory Management	4
Logistics and Planning	5
Order Quantities & Samples	6
Total Cost of Ownership (TCO) & Pricing	9
Calculation Example: ROI	10
Specials & Custom Solutions	13
Ordering with Confidence (Cancellations & Returns)	14
Request Checklist	16
Contact	16



IDEM Safety Switches & Teleson At a Glance

Why choose IDEM Safety Switches and Teleson?

IDEM develops and manufactures *World Class Safety Switches* at its production facility in the United Kingdom. Where standard switches regularly fail due to moisture ingress or lack of robustness, IDEM provides the solution with a true focus on quality: stainless steel 316 housings, fully encapsulated electronics and high-performance IP69K sealing

Teleson brings this British quality to the Benelux as a distributor. This means:

- Direct lines to the factory: shorter and faster communication compared to suppliers in, for example, Asia or the US.
- Local buffer stock: we keep critical products in stock in our own warehouse to safeguard your service continuity.
- Technical expertise: direct advice on the correct application for your specific environment.

Who is this e-book for?

For everyone involved in machine safety within machine building and demanding production environments. We focus specifically on engineers for whom reliability is critical, and on maintenance managers who are looking for robust solutions to minimise downtime to an absolute minimum.

Why this matters

- We eliminate weak links in machine safety (moisture).
- We set up customer-specific inventory, so you are never caught short during downtime.
- We ensure continuous access to the latest safety technology.

In doing so, we not only safeguard the safety of employees and end users, but also ensure that your production process keeps running, regardless of the conditions.



Lead Times & Inventory Management

Control over the supply chain in a dynamic market

Ordering a safety switch is straightforward in itself. But when a production line comes to a halt because a specific safety switch has a lead time of four weeks, a simple order quickly turns into a complex problem. For purchasers and maintenance managers, unpredictability is the greatest enemy.

How does production work at IDEM?

IDEM Safety Switches manufactures its high-quality components in the United Kingdom. This offers a major advantage over production in Asia or the US: shorter lines of communication. However, IDEM largely operates on a make-to-order basis to accommodate the wide variety of configurations available. As a result, standard factory lead times typically range from three to four weeks. For regular machine-building projects, this is perfectly manageable. But in the case of an acute failure in a food processing plant, waiting several weeks is simply not an option.

What you can do to stay in control

At Teleson, we bridge the gap between production and urgent demand. We offer three concrete strategies to guarantee supply reliability:

Working with call-off orders

With call-off orders, the stock is held by us and you are no longer dependent on factory lead times. As stock levels run down, we proactively plan a follow-up order.

Escalation in the event of downtime

In urgent situations, we immediately contact production planning in the United Kingdom to arrange expedited production or accelerated transport.

Buffer stock

For frequently used items, for example in the food industry, we maintain a standard buffer stock. Popular stainless steel interlocks and emergency stop switches are therefore often available directly from our own inventory.



Example delivery – Step by Step

1

A machine builder (OEM) in the food industry uses around **250 units** per year of a specific IDEM stainless-steel interlock with RFID coding for its machines.

2

Placing separate orders per project involves risks: factory lead times can vary, and the administrative burden of multiple purchase orders is unnecessarily high.

3

The purchaser wants to get rid of this hassle. In consultation with Teleson, a **call-off order** is set up. The annual requirement of 250 units is purchased and reserved at a fixed project price.

4

Teleson takes over the inventory risk. We normally order the full quantity, so it is held in stock in our warehouse in Utrecht.

5

The customer's production planning needs 50 switches for this week's assembly. They send a simple call-off email to Teleson.

6

Because the switches are physically on the shelf at Teleson, they are dispatched **within one working day**. The customer receives them as quickly as possible, with minimal waiting time.

7

In the background, Teleson monitors consumption. As soon as stock levels in Utrecht drop below a certain threshold, we get in touch to discuss a follow-up order. Our customer is never left without stock.





Order Quantities & Samples

From prototype to series production

Many engineers recognise this dilemma: for a new design, you only need a single unit to test. But the supplier applies a minimum order quantity of 25 or even 100 units, which slows down innovation..

At IDEM and Teleson, we understand that validation comes before volume. Especially for larger machine builders, you want proof that a switch is truly watertight before redesigning an entire machine. That is why we apply a flexible approach to samples, standard products and custom solutions.

Samples: seeing is believing

A datasheet tells you a lot, but a real-life test in your own washdown environment tells you everything.

Objective

Objective
For R&D projects and validation, we offer the option to request samples.

Process

Together, we select the right type of safety switch. Install it at a critical point in the machine (the “hotspot” for failures).

Result

Only once the switch successfully passes the cleaning process (CIP/SIP) do we move on to the next steps.

Standard products: low thresholds

For regular catalogue items from IDEM Safety Switches, such as standard stainless-steel interlocks or rope pull switches, **we do not apply a minimum order quantity (MOQ)**.

Specials: custom solutions for series builders

For OEM machine builders, deviating from the standard can be attractive. For example, switches can be supplied ex works with a specific cable length or connector.

- Benefit: this saves valuable installation time, as technicians no longer need to cut, strip or extend cables in the field.
- Condition: because this requires a customer-specific production process in the United Kingdom, a minimum order quantity (MOQ) does apply. This is clearly communicated and agreed upon in advance.



At a Glance

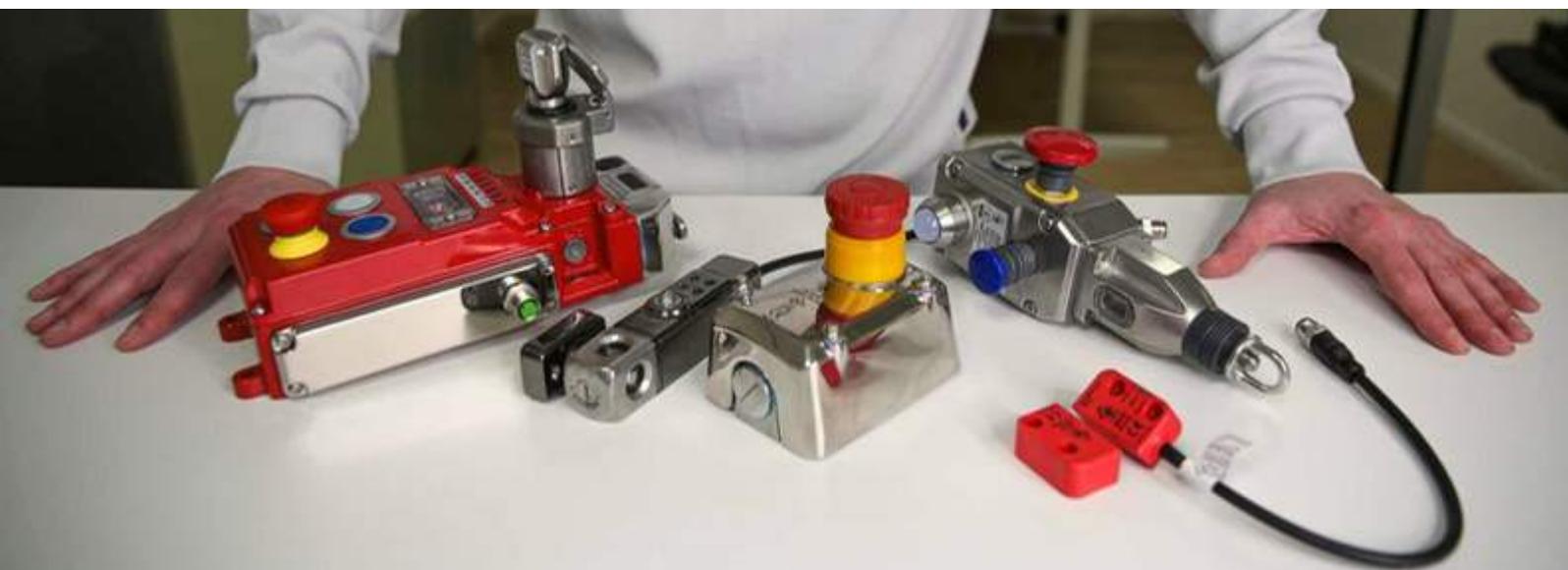
Request type	Purpose	MOQ (Minimum Order Quantity)
Sample	Testing & validation (R&D)	Available per unit
Standard	Service & replacement	Available per unit
Special	Series production & efficiency	Yes, varies per situation

Questions?

Would you like more information about order quantities or samples? Feel free to get in touch. We are happy to think along with you.

☎ +31 30 263 1000

✉ sales@teleson.nl





Total Cost of Ownership (TCO) and Pricing

Why the purchase price is only the tip of the iceberg

A classic discussion at the meeting table: the engineer wants the robust stainless-steel safety switch for maximum reliability, while the purchaser sees that the standard plastic version is significantly cheaper. Who is right?

In a dry and clean application, a plastic switch is often a perfectly adequate choice.

But in a washdown environment, where daily cleaning with water, chemicals and high pressure is the norm, cheap almost always turns out to be expensive.

The hidden cost of failure

In industries such as food processing and heavy process industry, failure costs are the real budget killers. A switch that is not IP69K rated will allow moisture ingress much sooner. The result: short circuits, unsafe situations and machines that come to an abrupt stop. At that point, the cost of the replacement component is negligible compared to the cost of production downtime and maintenance intervention.

The calculation: plastic vs. IDEM stainless steel

Let's look at a realistic scenario involving a safety interlock in a fish processing machine.

Option A: Standard plastic safety switch

- Purchase price: €50
- Service life in washdown:
 - On average 12 months (leakage/breakage).
- Consequence: Must be replaced once per year.
- Costs over 5 years:
 - 5× purchase price + 5× labour costs + 5× production downtime.
- Result: A significant cost and a source of frustration.

Option B: IDEM stainless steel 316 (IP69K)

- Purchase price: €150
- Service life in washdown: > 5 years.
- Consequence: Installed once and requires no attention for years.
- Costs over 5 years:
 - 1× purchase price + 1× installation.
- Result: Significantly cheaper in the long run.



Project Pricing for Series Production

Of course, we understand that the cost price for a machine builder producing hundreds of machines per year is very different from that of an end user looking for a single replacement. For series production, we make **project-based pricing agreements**.

By consolidating the annual demand, we can make the unit price of stainless-steel components significantly more attractive. This allows you to build the highest quality into your machine, without pricing yourself out of the market.

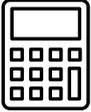
Curious about the ROI for your machine design?

We are happy to calculate together how quickly the investment in IDEM stainless steel pays for itself by eliminating downtime.

 +31 30 263 1000

 sales@teleson.nl





Calculation Example: ROI

Hard numbers: plastic vs. IDEM stainless steel in a hygienic environment

Let's be honest: if you only look at the purchase price, the plastic switch always wins. A standard plastic switch costs a fraction of a high-quality IDEM stainless steel 316 variant. But in an environment where daily high-pressure cleaning is standard practice, that low purchase price is an illusion.

Example scenario

We use a production line in meat processing as an illustration.

Environment	Issue	Failure frequency	Downtime
Washdown (daily cleaning, chemicals, moisture)	Standard switches fill up with water.	The plastic switch fails every 12 months	With each replacement, the production line is shut down for 30 minutes (conservative estimate).

The comparison (TCO after 2 years)

The table above compares the total costs over a period of 24 months:

Cost item	Option A: Standard plastic	Option B: IDEM stainless steel 316 (IP69K)
Purchase price (indicative)	€ 65.00	€ 215.00
Number of replacements (2 years)	2x (total of 2 switches)	0x (total of 1 switch)
Total material costs	€ 130.00	€ 215.00
Technician labour (€65/h)	€ 130.00 (2x 1 hour)	€ 0.00
Downtime costs (€5,000/h)	(€5,000/h) €5,000.00 (2x 30 minutes)	€ 0.00
Total after 2 years	Total after 2 years	€ 215.00

Conclusion

The “expensive” IDEM stainless-steel switch is ultimately more than €5,000 cheaper per safety point. Multiply this by the number of locations in a factory (for example 20 units), and the savings over a two-year period become substantial, purely by choosing quality.



Available Configurations

The right type for the right application

“I’m looking for a stainless-steel switch for a hygienic application.” It sounds like a simple question, but the answer depends entirely on the machine. Does the machine have a run-down time? Is the door opened every hour or every minute? And how is the machine cleaned?



Incorrect selection is the source of much frustration and that is exactly what we want to avoid. A non-contact sensor is hygienically ideal, but unsafe if the machine continues to run after the door is opened. A mechanical tongue switch may be cost-effective, but can become a dirt trap in a meat processing plant.

To help you navigate these choices, we split the selection process into two steps: material and technology.

Step 1: Material selection

Plastic / polyester (light duty)

Suitable for dry, clean environments or light-duty applications where chemicals do not play a role.

Stainless steel 316 (hygiene / heavy duty)

The standard for applications such as food processing and pharmaceuticals. Better resistance to aggressive cleaning agents, corrosion and mechanical impact.

Step 2: Technology and function

Which type of switch fits the safety risk of the application?

	Non-contact	Tongue interlock	Solenoid locking	Rope switches (pull-wire)
<i>Application:</i>	Doors and hatches that are opened and closed frequently.	Physical doors where a positive mechanical connection is required.	Machines with run-down time, such as saws, mixers and centrifuges.	Conveyor belts and long production lines.
<i>Advantage:</i>	No mechanical wear and easy to clean.	The “tongue” keeps the door closed under vibration.	Physically locks the door until the machine is released.	Provides an emergency stop function along the entire length of a line.
<i>Note:</i>	Does not provide physical locking; the door can always be opened.	Has moving parts (open cavity), which is a point of attention in hygienic zones.	Available in IP69K versions, which is rare in the market.	Resistant to harsh conditions and available with patented accessories.

The golden rule for cleaning

Is high-pressure cleaning or cleaning at high temperatures used? Then accept nothing less than IP69K. Many “waterproof” IP67 switches fail within months under these conditions due to condensation and seal failure. Overly intensive cleaning is perhaps the biggest cause of quality issues in safety switches.



Specials & Custom Solutions

When standard is almost enough

The catalogue of IDEM Safety Switches is extensive, but the reality of machine building is often more complex. Sometimes a unique machine requires a unique solution. Where large corporations are often rigid (“you can choose from the catalogue or not at all”), the flexibility of IDEM and Teleson is precisely our strength.

Why choose a “Special”?

For a one-off project, a standard solution is often sufficient. But for series machine builders (OEMs), a small modification to a component can deliver significant savings during assembly. Consider:

- **Installation time:** by supplying switches pre-wired with the correct connector and pin-out, technicians no longer need to cut, strip or solder cables in the field. This prevents wiring errors and saves minutes per machine.
- **Hygiene:** specific *food-grade* cabling resistant to certain cleaning agents, mounted ex works so the IP69K sealing remains intact.
- **Anti-tampering:** unique RFID coding per customer or project to prevent operators from bypassing safety systems using a spare actuator.

The process: from sketch to series production

Step 1: intake and specification

Define the requirement. Does it involve a different cable length, a specific connector pin-out or a customised mounting plate? We discuss the technical requirements and the expected annual volume.

Step 2: Engineering

Teleson communicates directly with the design team at IDEM Safety Switches. They assess feasibility and create a preliminary drawing or specification. Because IDEM manufactures in-house, we can quickly determine what is possible.

Step 3: Proposal and sample

After technical approval, you receive the information and a price proposal (often linked to a minimum order quantity). If required, a physical prototype (sample) is produced for validation in the machine.

Step 4: Production and delivery

Once approved, the “Special” receives a unique article number. Production is scheduled and we take responsibility for inventory management, allowing you to order the custom solution on a call-off basis, just like a standard product.

Ordering with Confidence (Cancellations & Returns)



Rules for cancellations and returns

Clear agreements upfront prevent discussions afterwards. At Teleson, we strive for flexibility, but when it comes to safety components for the food and pharmaceutical industries, strict boundaries apply. Why? Because food safety and traceability are non-negotiable.

The hygiene nuance: why we are strict

An IDEM safety switch that has been inside a high-care zone of a meat processor cannot simply be returned to stock. Even if it has only briefly been out of the box, there is a risk of cross-contamination (allergens, bacteria). We must be able to guarantee our next customer that a product is 100% factory-new and uncontaminated.

This is why we apply stricter return policies than you may be used to with suppliers in other industries.

What is possible:

- **Cancellation before production starts:** Free cancellation or modification as long as production in the United Kingdom has not yet started.
- **Returns of standard products:** Returning unopened, original stock items (by agreement; a restocking fee often applies).
- **Warranty:** Return or replacement in the event of a technical defect or manufacturing fault.

What is generally *not* possible

- **Opened packaging:** We cannot resell opened products as new.
- **Cancellation during assembly:** Once assembly of your specific configuration has started, cancellation is no longer possible.
- **Returns of Specials:** Custom-made items (for example with a unique pin-out) cannot be returned.

Overview: what is or isn't possible

Situation	Possible?	Conditions
Cancellation before production start	✓ Yes	Immediate notification required
Return of unopened standard switch	✓ Yes	By agreement (restocking fee may apply)
Return of opened packaging	✗	Sometimes by agreement
Return of custom solutions (Specials)	✗ No	Customer-specific product
Defect under warranty	✓ Yes	Always covered by Teleson



Our tip: order with confidence

Not sure about the article number or specification? Don't take a gamble. Let our colleagues double-check the configuration in advance. This prevents unnecessary costs and a warehouse filled with unusable components.





Efficient Collaboration with Teleson

The more complete your request, the better our response

At Teleson, we work with a set of standard questions to process your safety request smoothly and efficiently. This allows us to immediately advise the right stainless-steel solution, prepare an accurate quotation and, where necessary, liaise directly with IDEM Safety Switches on planning or customisation.



Use this short checklist for your request

- *Annual volume:* What is the expected annual demand (relevant for price tiers)?
- *Quantities:* What do you need in the short term?
- *Environment:* How is the equipment cleaned (CIP, high-pressure, chemicals)?
- *Application:* What is being safeguarded (door, hatch or conveyor)?
- *Safety:* Which level (PL/SIL) or coding (RFID) is required?

We deliver a watertight solution

By aligning early, we prevent technical mismatches and delays, whether it concerns a standard spare part or series-based custom solutions. We ensure that you not only receive the right switch, but that your system is *genuinely* reliable.

Ready to start your request smoothly and thoughtfully?

Send the answers from the checklist to us, or contact your dedicated point of contact directly.



+31 30 263 1000



sales@teleson.nl