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Solutions for the food & beverage industry.

The challenges facing the food & beverage industry are varied and complex. Failure to comply with national safety and quality standards can be time-consuming, expensive, and can result in accidents or contamination. Demands for shorter production times put increasing pressure on a need for reliable and continuous operations. Extreme temperatures and corrosive environments mean you need products which can handle extreme conditions. And this is before we even get to the latest technological and consumer trends.

From sensors to personal protective clothing, from food safe cleaners to thermal imagers, read on to discover specialist product solutions and components ideal for food and drink production.

And with the challenges you're facing in the industry we know you have better things to do than worry about your order being safe and compliant. No matter where you are, we ensure your products get delivered as efficiently and carefully as possible.

Leave the how to us.

Join the conversation









Terms & Conditions

To view our latest prices, charges and full terms see RS Conditions of Sale as set out online at za.rs-online.com.

Prices shown online are inclusive of specified discounts, no further discounts will be applied. Pricing shown is VAT inclusive and subject to change.

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Our Solutions

Our solutions support you across the product lifecycle through design, build and maintain.

We can also give you advice on flexible delivery options, cost-saving ways to help you manage your inventory and procurement, through to preventative maintenance and eCommerce solutions.



Product Support

- We off er easy access to product support resources online, via email or by phone.
- Our Customer Service Team can help by understanding your needs and offering product support or directing your enquiry to our technical team.
- Speak to a live chat member on our website for help in finding products or other technical information.
- Or take a look at our technical data sheets which are available on our website at product level. This can help save time, allowing you access to technical information 24/7.





Delivery and Invoice Options

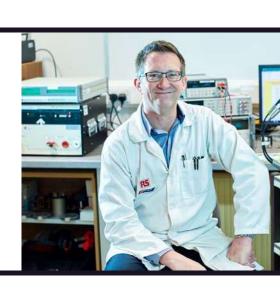
With a range of flexible delivery and invoicing options all designed to suit you

- Local stock: 24/48 hours to main cities in SA.
- Global stock: 4-6 working days unless otherwise stipulated.
- Free delivery for orders over R1000 within SA.

Ordering

There are four different ways that you can place an order

- Online This is the easiest way to order. Products can be delivered as quickly as. the next day if items are in local stock.
- Email send you order/query to Africa@rs-components.com.
- Phone By calling us on +27 (0) 691 9300
- **Branch** You can get access to locally stocked products at our location in Kyalami Business Park, Midrand.







Solutions Procurement Solutions

We have different solutions to help you manage your RS orders. From simple web tools to integrated eProcurement solutions.

Our procurement solutions support customers with complex needs to drive vendor consolidation, reduce costs, improve productivity and deliver innovation.

Product Plus

RS Product Plus is an exclusive service for customers looking to consolidate their spend. Our specialist team can support your requirements and help you source products not published on our

Using our expertise and relationships with over 2,500 key manufacturers, we provide access to over a million products. We will also let you know if we find an alternative product offering extract functionallty or value for money benefits.

- Consolidate your vendors: saving time managing multiple suppliers and reducing purchase-to-pay costs
- Leverage your spend: by placing your orders with fewer suppliers
- Save time and speed up sourcing: as there's no need for your teams to search and negotiate with multiple suppliers



eCommerce Solutions

For a more efficient process for your industrial and electronics product procurement, we have a service to fit your business requirements. From web-based and mobile ordering through to integrated procurement solutions.

PurchasingManager™

A free web order management solution that helps you manage your spend, whilst providing visibility of orders placed through the RS website.

PunchOut

Integrated into your own eProcurement system, providing fast and easy access to our full product range and purchase information.

eOrdering

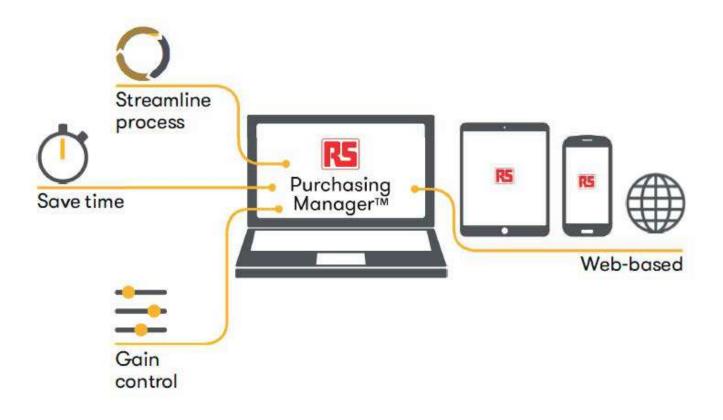
Fast and secure ordering direct from your system to ours. Improves accuracy by eliminating order and invoicing errors.

elnvoicing

Fast and secure invoicing direct from our system to yours. Eliminates paper, whilst saving you time and money in administration processes.

PurchasingManager[™]

Cut costs, manage processes and improve control



RS PurchasingManager[™] is a free, web-based order management tool that can dramatically streamline your buying processes, save your business substantial time and money and improve control.

It helps you manage your procurement processes whilst cutting back your procure-to-pay costs, making it an effective way to reduce the costs of high-volume, low-value, ad-hoc purchasing.

This powerful, customisable tool is ideal if you don't have an in-house eProcurement system. And there's no cost or investment involved, as you don't need to upgrade your IT systems or software.

Cut costs and take control with an RS eCommerce Solution

If multiple people across your organisation are placing large numbers of low-value orders, you have little control over who's ordering what. And you're almost certainly wasting both resources and money. You could also be losing valuable production time if the ordering process only starts when a part or item needs replacing. Delays can occur while the purchasing process lumbers into action – meaning costly downtime. The good news is there's a simple and effective way to cut your company's procurement costs and gain control of your budget spend.

Purchasing action	Average process cost	The difference with an RS eCommerce Solution
Searching for supplier and product	*R 260.00	Direct access to our inventory of over 500k products means less time shopping around. You can search directly for the parts you need with our eCommerce Solutions.
Placing the order	*R 485.00	Check stock availability, prices and technical data instantly. No more inaccurate data, time-wasting repetition or needless manual input.
Chasing supplier and receiving delivery	*R 310.00	Count on us for on-time deliveries and efficient fulfilment.
Processing invoices	*R 500.00	We can support fast and efficient elnvoicing or consolidated monthly summaries, personalised to suit your business.
Paying supplier	*R 260.00	Our elnvoicing capabilities ensure easy invoice reconciliation and quicker payment processing.
9	*R 1815 Total process cost	A simplified procure-to-pay process, saving you money

^{*} Process costs will differ depending on the industry and type of product being purchased. Values are based on research done in the UK and are subject to the exchange rate that was used at the time. Find out more at www.rs-connectedthinking.com.

End inefficient, costly procurement processes

Procurement teams and engineers face a number of challenges when it comes to the maintenance, repair and operation of their organisation's assets and facilities. The supply chain for indirect materials is complex due to the number of stakeholders involved, a fragmented supply base and the sheer number of products split across multiple categories. In addition, there is constant pressure from senior management to reduce costs.

As one of the largest suppliers of industrial supplies, RS is in a unique position to understand the complex needs of its customers and to help these businesses improve their processes and make efficiencies.

The crucial statistic for organisations to understand is that with indirect procurement, process costs can be twice as much as the amount spent on the products themselves. So if your organisation spends £100,000 on purchasing products over the course of a year, you will spend a further £200,000 on processing or 'soft costs'.



As such, there is significant value in reducing process costs, rather than focusing purely on the purchase price of individual items.

The challenge

An example of how RS has been able to help a customer take better control of its process costs is our work with a well-known confectionery manufacturer, a market leader within its category with a turnover in excess of £100 million.

RS has worked with this company for a number of years, supplying a wide variety of products. This includes electrical and automation products, PPE equipment, tools and test equipment, which are used by maintenance engineers to help keep operations running.

As a large organisation, the confectionary manufacturer had a long-term plan to streamline their purchasing process, which included reviewing all indirect spend. The procurement department was challenged to reduce admin and bureaucracy around the purchasing process so that it would be quicker and require less input from multiple stakeholders across the business.

Typically, the customer was spending significant time locating suppliers who had the products they needed and then comparing quotes; raising POs with a finance team; and arranging for delivery to be achieved in a time that didn't impact the day-to-day business.

They also felt there was a great deal of duplication and manual entry of information during purchasing. In short, the process was delaying procurement of low-value products, while taking valuable time away from employees' core responsibilties.

The solution

The first step was to process map the company's current procure-to-pay process. This was led by RS's dedicated team of eCommerce specialists and the customer's key stakeholders then, using a process cost calculator (produced in collaboration with Chartered Institute of Procurement & Supply), it was possible to calculate the time taken for each process step in order to produce the total cost to the company for every order they place.

By doing this, it was identified that each PO raised, took 88 minutes from end to end, costing £74 per order. For RS alone, they were placing over 200 orders annually, with a similar number of orders being placed with multiple suppliers.

RS found that the simplest way to remove many of the issues (and additional cost) in the process was to introduce PurchasingManager™ to the customer. PurchasingManager™ is a web-based, order management system used alongside the RS website. Buyers can create account structures across their organisation, assign spend controls, cost centres and approval limits to help manage all RS Online purchasing.

The system allows the end user, usually an engineer, to go onto the RS website, choose the product they need, order it and see when the delivery will be made. Behind the scenes

a confirmation request is sent to a senior colleague who can quickly approve the cost and the order is processed.

PurchasingManager™ addressed the authorisation process and became the only authorisation required to approve an order from RS. Once an order is approved, it is sent directly to RS without procurement being involved. The confectionery customer was able to use a single monthly blanket order rather than individual POs, meaning that the only PO processing now takes place at the end of the month.

The existing process was unnecessarily complicated:

- An engineer would choose a basket of goods, raise a paper requisition and send it to their superior for authorisation
- Once this authorisation was granted the requisition was sent to procurement. Procurement would then check the price online before raising a purchase order
- The purchase order would need to be signed off by the head of procurement before the PO was emailed to RS for fulfilment
- Once the goods were delivered, a three-way match was needed between the email request, the PO on their system and the individual invoices

The outcome

The customer now has a simplified workflow with empowered end users, which has significantly reduced processing costs, enabling all functions involved in the indirect purchasing process to focus on value added activities in their respective roles. The customer has moved from an average cost per order of £74 before PurchasingManager™ was introduced, to £46 now. The number of orders also increased to 1,089 annually as they consolidated more orders with RS, reducing their supplier base. Based on the new cost per order, this equated to a £30,492 saving annually compared to their old process.

The entire purchasing process has been greatly speeded up, more employees are ordering from trusted suppliers (rather than using local or online purchases), which improves contract compliance, and parts are being successfully delivered when engineers want them, which means there is far less downtime.

The result is that the customer has gone from an inefficient, costly process with too much duplication of tasks and a lack of clarity to becoming highly efficient with real transparency throughout the purchase-to-pay process.

£30,492 (3.7 weeks)



FOOD & BEVERAGE INDUSTRY PRODUCT HIGHLIGHTS

Food Safe Lubricants and Cleaners

A range of Food Processing Safe cleaners & lubricants available from Ambersil, including greases, penetrating oils, multi-purpose cleaners and degreasers all NSF registered and suitable where food contact may occur.

Search 'Ambersil Food' at RS Online



Stainless Steel Photoelectric sensors

M18 photoelectric sensors with a high grade stainless steel housing sealed to IP69K. Ideal for wash-down applications in the Food & Beverage industry, and approved for use with Ecolab and Diversey industrial cleaners.

Search 'E3FC' at RS Online



Radar Guided Level Probes

Guided radar level probes providing accurate and consistent level measurement, suitable for oil or water based fluids. Stainless steel probe, with options for process temperatures up to 100°C and hygienic versions up to 150°C.

Search for 'Sick Radar' at RS Online



Food Environment clothing

We stock an extensive range of food production environment suitable clothing. This includes gloves, aprons, coats, tabards and overshoes and hair protection, from leading brands such as Ansell, 3M and many more.

Search for 'Food Clothing' at RS Online



Metal Content Cable Ties

Metal Content cable ties specifically designed for use in food industries. A special metallic pigment throughout the tie enables even small `cut-off' sections of the tie to be detected by standard metal-detecting equipment. Available in a range of sizes and colours.

Search 'Metal Content Ties' at RS Online



The Linecard

This linecard helps as your guide to the key technologies and brands in our offer which are most relevant to the food and beverage manufacturing sector.

PERSONAL PROTECTION	Ansell WEX SKimberty-Clark PROFESSIONAL SOLWGIA
TEST & MEASUREMENT	FLUKE. Megger. KEYSIGHT TECHNOLOGIES Be sure. CSS FLUKE. Technologies FLUKE. Millutoyo FRD
SITE SAFETY	MOFLASH* © ecospill CLubetech KAC Odetectortester Odetectortester
FACILITIES CLEANING & MAINTENANCE	** Kimberty-Clark PROFESSIONALE WYPALE Rubbormaid Commercial Profession People THE SOLUTIONS PEOPLE ROCOL Rubbormaid Commercial Profession THE SOLUTIONS PEOPLE
CABLES & CONNECTORS	HellermannTyton BELDEN DEUTSCH WELAPP WOLST DEUTSCH DEUTSCH WOLST DEUTSCH D
SENSORS	OMRON cynergy@mponents SICK ABB ifm electronic ifm
ELECTRICAL, AUTOMATION & PROCESS CONTROL	Schneider OMRON SIEMENS ebmpapst FATON ABB Coloration FATON ARB Coloration FATON Baumer FATON FROM FRO
PLUMBING & PIPELINE	Elegris Darker Bluid Control Systems Fluid Control Systems
PNEUMATICS, HYDRAULICS & POWER TRANSMISSION	EKF SMC Elegris SIMINORGREN, SILES. FESTO SUS CROUZET LABOR FROM AND PROPERTY OF THE PROPERTY
TOOLS & CONSUMABLES	BAHCO Weller Weller STANLEY. Weller PRO WHAKCO PRO

INGRESS PROTECTION (IP) RATINGS

The Ingress Protection (IP) rating system is an internationally recognized scale that relates to proven protection against environmental factors such as liquids and solids.

Ingress protection ratings can be identified by the letters IP, followed by two numbers. These numbers define the amount of protection a digital scale has against specified elements and its ability to resist foreign matter that could otherwise get inside the product and cause it to fail.

for 30sec x 4 angles.

1st digit = Degree of protection against solid objects	2nd digit = Degree of protection against water
No Protection	No Protection
Protected against solid objects greater than 50mm.	Protected against drops of water.
Protected against solid objects greater than 12.5mm.	Protected against drops of water at a 15 degree angle.
Protected against solid objects greater than 2.5mm.	Protected against water spray at a 60 degree angle.
Protected against solid objects greater than 1.0mm.	Protected against water spray splashing from any angle.
Protected against dust that could cause sufficient harm.	Protected against water jets from any angle.
Protected against all dust.	Protected against powerful jets of water or heavy seas.
Example:	Protected against temporary immersion in water (30 minutes at 1M).
IP 4	Protected against the effects of permanent immersion in water (up to 5M).
Protected against Protected against water solid objects greater spray splashing from than 1.0mm. any angle.	Protected against close-range high pressure, high temperature spray downs (80 degC water at 80-100bar

What is IP69K?

The IP69K rating provides protection against ingress of dust and high temperature, high pressure water – making products with this certification ideal for use in conditions where equipment must be carefully sanitized.

In the food processing industry, where hygiene and cleanliness is paramount, equipment must be able to withstand rigorous high pressure, high temperature wash-down procedures.

The IP69K rating is the highest protection available.

What are the advantages of IP69K?

In environments that require heavy washdown, such as in the food processing industry, the combination of water, chemicals, high pressures and temperatures can prove fatal for electronic circuits and instrumentation.

The IP69K rating offers complete assurance that the piece of equipment that has undergone that tests is both durable and resistant and conforms to the highest protection rating on the scale.

TELEMECANIQUE EXTENDED SENSING RANGE IP69K RATED

- TWICE nominal sensing distance
- FLUSH mount
- FAST switching frequency
- 2 & 3 wire controlled devices
- · LED status display
- OPERATING temperature range: -25 \rightarrow +70° C
- REVERSE polarity and short circuit protection (dc tupes only)





M30 X 1.5, PNP-NO 74MM LEN , 12 \rightarrow 48 V DC SUPPLY VOLTAGE
M30 X 1.5, NO 62MM LEN , 24 \rightarrow 240 V AC/DC SUPPLY VOLTAGE
M30 X 1.5, NO 73MM LEN , 24 \rightarrow 240 V AC/DC SUPPLY VOLTAGE
M18 X 1, NO M18 BARREL 73MM LEN , 24 \rightarrow 240 V AC/DC SUPPLY VOLTAGE
M18 X 1, NO 62MM LEN , 24 \rightarrow 240 V AC/DC SUPPLY VOLTAGE
M12 X 1, NO 62MM LEN , 24 \rightarrow 240 V AC/DC SUPPLY VOLTAGE
M12 X 1, NO 53MM LEN , 24 \rightarrow 240 V AC/DC SUPPLY VOLTAGE
M12 X 1, PNP-NO 53MM LEN , 12 \rightarrow 48 V DC SUPPLY VOLTAGE
M12 X 1, PNP-NO 62MM LEN , 12 \rightarrow 48 V DC SUPPLY VOLTAGE
M18 X 1, PNP-NO 62MM LEN , 12 \rightarrow 48 V DC SUPPLY VOLTAGE
M18 X 1, PNP-NO 74MM LEN , 12 → 48 V DC SUPPLY VOLTAGE

IP69K 304 STAINLESS STEEL WALL BOXES

- Material: Stainless steel
- IP69K rating
- Lockable
- Double lipped edge to ensure higher strength and ease of installation
- Easy to use, including removal of the doo



758-6996 300 X 300 X 200MM

758-7006 400 X 300 X 200MM

BNS 33S MAGNETIC SAFETY SWITCH, STAINLESS STEEL IP69K RATED

- Control category up to 4 to EN954-1 in combination with a safety monitoring module
- IP69K protection, cable connection suitable for food industry (LiYY)
- Coded switch, actuation only possible with BPS33S actuating magnet
- Dimensions: L7.5 x W27 x H88 mm



S SCHMERSAL

617-5150 100 V AC/DC

NDR SERIES EMERGENCY STOP PUSH BUTTONS, IP69K RATED

- This range of Head Emergency Buttons are used in control cabinets, control panels, in elevator construction, on conveyor or transport plants.
- After the manual actuation, the components initiate or switch off work processes and functional processes.
- The range of NDR Series Emergency Stop Push Buttons are available in the form of pushbuttons, joystick switches or key-operated switches.
- They are available in a single, dual and tri state contact blocks.
- There is an option to have N/O (normally open) and N/C (normally closed) contact versions to satisfy every requirement.
- Red 50mm Round Head Emergency Button.
- Key Reset.



S SCHMERSAL

742-0763 SEPARATE SPRING ELEMENT, BLACK BELLOWS **742-0760** SEPARATE SPRING ELEMENT, WHITE BELLOWS

742-0757 INTEGRATED SNAP-ACTION MECHANISM, WHITE BELLOWS

INDUSTRIAL OF THE PROPERTY OF

TAKING THE IOT CONCEPT TO THE FACTORY FLOOR

In the consumer space the concept of 'The Internet of Things' is well established. Cloud connected devices and services, such as Google Nest, are allowing us to create a connected home with thermostats, cameras and even doorbells all connected via the Internet to smart apps and cloud services.

So, the concept is proven, the technology exists, and the benefits are clear: convenient, mobile or remote access to devices or data reliably and securely helping you to make decisions faster.

You may have already started an Industrial Internet of Things project, or you may have thought I know I need to do something - but where do I start?

Within the following pages you'll find products which can help unlock productivity data, products which can add intelligence to existing machinery making them IIoT ready and products which enable to you to monitor conditions or make measurements and share these easily with colleagues or for reference.

One thing is clear. Industrial IoT and the concept of Industry 4.0 is here to stay, and you need to be considering how – not if – you will start using it today.

6 STEPS ON THE IIOT JOURNEY

Based on insight from manufacturers and IIoT pioneers we've listed six steps to consider when in pursuit of the connected factory.

CAREFULLY CONSIDER WHAT YOU ARE TRYING TO ACHIEVE

Be clear on what the challenge is you wish to use IIoT to solve. If it's just one or two elements or conditions which you want to monitor or track, focus on those. It will reduce complexity and cost allowing you to prove the benefits faster.

START SMALL

Don't try and create a complete lloT infrastructure in one hit, even if you are considering purchasing an off the shelf software solution. Prove it, build on that knowledge, and demonstrate the value.

GET THE BUY-IN FROM IT

If this could be a potential barrier don't try and go around the IT team, be clear on your objectives and work with them. If they have concerns, you can start with closed networks or cellular networks (3/4G) which create physical isolation from the business's IT infrastructure for which the IT team are responsible.

OPERATIONAL EQUIPMENT EFFECTIVENESS (OEE)

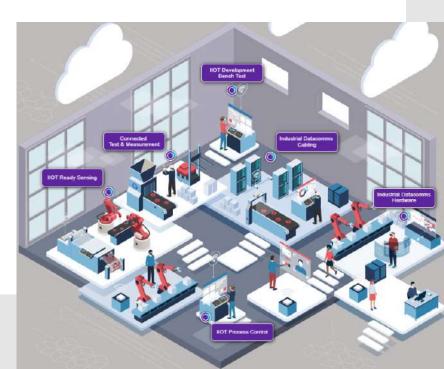
If your primary objective is improving this then you may wish to consider a combination of tapping into existing data – trapped in PLCs or other parts of the control system – and connected T&M which can help improve predictive maintenance, reduce unplanned downtime and speed up the diagnostics process. You may also need to add additional sensors which can provide data on conditions – for example motor vibration – which are not know to the control system.

EXPOSING PRODUCTIVITY DATA

If your main objective is accessing production data so you can better understand how your process is performing, unlocking existing data should be your first step. Virtually all the key attributes – speed, output, process variables, etc – are available within the process control system. In many cases these can be retrospectively released via protocol monitors completely transparently, without the control system being compromised

START ON-PREMISE BEFORE THINKING ABOUT THE CLOUD

This approach has multiple benefits. Firstly, it can allay security concerns that your IT team might have. It can also simplify the solution, while not preventing the data from being 'cloud ready' in the future. Our experts suggest that in many cases the information will only be used or accessed on site so the benefits of a cloud-based solution might be negligible.



What is IOT, IIOT & Industry 4.0?

In short, IoT is a broad term used to refer to all devices which are connected to the internet beyond the familiar mix of PCs, laptops, phones and tablets.

The Industrial Internet of Things simply put, IIoT takes the concept of networking devices and connecting them to the internet to share data – locally or remotely – in factories, industrial processes and industrial buildings. Sensors collect the information, which is consolidated via a gateway to the local network, then onwards through an edge controller to the internet or the cloud – data servers within large data centres.

Industry 4.0 is when components communicate independently with the production system and, if necessary, arrange for repairs themselves or reorder materials. It's when people, machines and industrial processes network intelligently.

What are the advantages of IOT?

A few examples of how the manufacturing industry is using IloT:

- Optimising the manufacturing line:
 - Industrial IoT sensors enable continuous monitoring of the production line from start to finished product. This enables operators to continuously fine-tune the manufacturing process saving both time and money
- Inventory and supply chain management:
 manufacturing stands or falls on the supply of raw materials
 and components. RFID (radio frequency identification) tags
 and similar technologies allow components and supplies to be
 tracked continuously, in real-time, from location to location,
 providing continuous monitoring of inventory and compensatory
 adjustments
- Packaging assessment:
 - Industrial IoT sensors allow manufacturers to monitor the condition of packaging during transit and storage and even assess how customers typically interact with it, enabling improvements to design
- Real-time manufacturing data:

 IloT devices can supply real-time operational data to suppliers, enabling responsive adjustments and also allowing the remote management of factors units.

XINABOX IOT STARTER KIT

- Everything needed to build an IoT smart (edge) device, that collects environmental data, and to which an actuator can be attached for automation projects.
- Control an electric gate, garage door, or fan, and connect to IoT dashboards to create alerts and control algorithms.
- View sensor data, IoT messages and diagnostics locally on the mini-OLED display.
- In the box: an xChip sensor for temperature, humidity and pressure, a Wi-Fi and BLE Core xChip (ESP-WROOM-32), mini-OLED display, a solid state relay to switch low voltage appliances, connectors, a programming interface plus a RasPi bridge.



IO-LINK SMART SENSOR

- Temperature and Humidity Recorder
- Combines three functions in one: sensor, interface and transmitter.
- The most recent standards of microtechnology and microsystems technology (sub areas of sensor technology and measurement technology) used in intelligent sensors of small sizes, are the basis for our CSS 014.

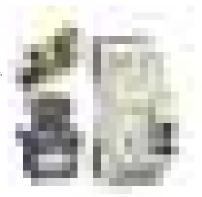




190-6041

WIRELESS HARMONY XB5R SERIES RECIEVERS

- Wireless and batteryless package, containing a push-button, set of caps and receiver.
- Reduction of wiring allows for a quick and easy installation.
- Flexible due to its mobility, giving greater control to operators.
 Can be used to remotely control machines up to 25 m away.



Schneider Electric

739-8060 10 COLORED CAPS, PLASTIC, 24...240 V AC/DC

739-8064 10 COLORED CAPS, METAL, 24...240 V AC/DC

739-8067 6 COLORED CAPS, METAL, 24 V DC



189-0174 M12 CONNECTOR, 18 → 30 V DC



PPE, protective clothing & footwear from the brands you trust to keep you safe.

Personal Protection Range Highlights

DISPOSABLE HAIR NET FOR FOOD INDUSTRY

- Blue nylon lightweight net which can be used alone or together with other headwear
- For use in food manufacturing, pharmaceuticals, electronics and in many other industrial applications





215-5095 ONE SIZE (PACK OF 100)

RS PRO WHITE UNISEX REUSABLE LAB COAT (M, L, XL)

- Ideal white coat for engineering, medical and all lab work
- ESD symbol on the breast pocket of the lab coat
- Unisex lab coat suitable for men and women
- Polyester, cotton and conductive fibres material



789-8087 MEDIUM 789-8081 LARGE 789-8090 X-LARGE

3M E.A.R SOFT YELLOW NEONS UNATTACHED DISPOSABLE EAR PLUGS

- Comfortable Fit
- · High Visibility
- Excellent Noise Reduction



3M E-A-R™

358-4141 36DB, 250 PAIRS

FACOM SLS HEIGHT SAFE TOOL CARABINERS

- Stainless steel construction with excellent corrosion resistance
- Quick and easy to attach or detach tools and other equipment
- Perfect for working at height to reduce
- injury and damage or loss of tools
 Available in a range of sizes to
- accommodate numerous tasks
- Non-lock snap design for easy access



FACOM!

910-3350 60MM

CHEMMASTER APRON

- Green, reusable, chemical resistant apron
- 91cm long
- Protection against chemical splashes
- PVC-coated nylon material
- Resistant to acids, alkalis, oils and spirits





419-653 36"X24" **419-669** 42"X36"

WHITE OVER SHOE COVER FOR USE IN FOOD

- · Elasticated ankle
- PVC Sole
- Liquid splash and dust barrier properties (Type 5/6)



Gridorty-Clork

756-4526 M TO L (PACK OF 10)

756-4520 XL TO XXL (PACK OF 10)



ANSELL HYFLEX 11-618, HYFLEX 11-618 BLUE POLYURETHANE COATED NYLON WORK GLOVES

- 20% lighter than previous versions of the same Ansell glove
- 0.8mm thick in total
- Offers good grip in dry or slightly oily conditions
- Superior comfort and sensitivity for the most delicate handling



ANSELL ACTIVARMR BLACK NITRILE COATED KEVLAR WORK GLOVES

- ActivArmr® Multipurpose Medium Duty Glove
- DuPont[™] Kevlar® provides protection and durability
- Reinforced ridges offer extra palm protection
- Enhanced wet or dry grip with foam nitrile coating



Ansell

713-4273 SIZE 9

713-4276 SIZE 10

Ansell

484-174 SIZE 8

....

484-180 SIZE 10

ANSELL ALPHATEC BLACK NITRILE COATED NYLON WORK GLOVES

- 5 gauge seamless nylon liner
- Retains minimal heat, reducing perspiration
- Exellent grip wherever chemicals, oil and grease are present
- Liquid proof glove
- Safety cuffs
- Colour edging for size identification



ANSELL HYFLEX 11-501



ANSELL HYFLEX 11-840, BLACK NITRILE COATED NYLON WORK GLOVES

- HyFlex 11-840 Nitrile Foam Glove Extreme durability and superior fit
- The ultra-thin FORTIX™ nitrile foam coating (patent pending) lasts up to three times longer than comparable coatings
- Provides enhanced dry grip and is 20% more breathable than earlier formulations



Ansell

749-7066 SIZE 8 **749-7060** SIZE 9 **749-7079** SIZE 10

Ansell

Versalite use

667-9775 SIZE 8 **667-9778** SIZE 9 **667-9772** SIZE 10

Ansell

791-7514 SIZE 8 **791-7523** SIZE 9

791-7526

SIZE 10

ANSELL ALPHATEC GREEN NITRILE COATED WORK GLOVES

- Excellent dry & wet grip enhance dexterity and reduce hand fatigue
- High-visibility cut liner acts as an indicator for when glove is cut as chemical protection is compromised



Ansell

 179-3085
 SIZE 8

 179-3086
 SIZE 9

 179-3087
 SIZE 10

ANSELL EDGE BLACK POLYURETHANE COATED POLYESTER (LINER) WORK GLOVES

- Good tear resistance, good grip, improved productivity
- EDGE 48-126 shows dirt less, glove is discarded less quickly
- Seamless structure, ensures comfort and encourages safety and glove usage



Ansell

 181-3323
 SIZE 8

 181-3325
 SIZE 9

 181-3326
 SIZE 10



PERSONAL PROTECTIVE EQUIPTMENT

DISPOSABLE COVERALL

- · Excellent barrier against dry particles and certain liquid chemical splash
- Soft and light, ultra low-linting laminated microporous material that drapes and hangs well over the body facilitating ease of movement
- 3 panel hood, 2-way zip and storm flap with sealable tape with elasticated back and ankles to reduce the risk of skin exposure
- Knitted cuffs and elasticated waist and ankles for increased comfort and freedom of movement
- Anti-static coating reduces static discharge and minimises the risk of sparks
- Nuclear particulate hold out



3M

185-7224 WHITE AND BLUE, M

185-7222 WHITE AND BLUE, XL

185-7219 WHITE, M

3M 6000 FULL RESPIRATOR MASK

- Reliable, convenient, compatible respiratory protection
- The 3M™ Full Facepiece Reusable Respirator 6000 Series offers versatility for many environments and applications
- Helps provide respiratory protection against a wide variety of gases and vapors when used with approved catridges and filters



3M

286-7136 SMALL

3M HF-800SD HALF RESPIRATOR MASK

- Greater breathability and comfort provided by the world's first quad flow cartridge system
- Push-button seal check helps bolster confidence that the respirator is properly sealed to the face
- The speaking diaphragm is designed to help provide easier communication while you work



3M

190-1913 MEDIUM

3M PELTOR 4800AF ANTI-MIST SAFETY GOGGLES WITH CLEAR LENSES

- · Panoramic vision lens
- · Anti-fog coating
- Fits over spectacles
- · Lens marking AOS.1.B



3M

465-9331 ANTI-MIST, CLEAR LENS

3M PARTLCULATES FILTER FOR USE WITH 3M 6000 Series RESPIRATOR

- 3M™ Particulate Filters 2125 offer P2 R protection against solid and liquid particles
- Suitable for use with 3M[™] all 3M[™] Reusable
- Half and Full Face Masks featuring the Bayonet Filter Connection System
- Bayonet fitting allows filters to be clicked into place for ease of fitting



3M

766-233 1 BOX OF 20

3M PELTOR OPTIME III EAR DEFENDER WITH HEADBAND

- Ideal hearing protection against noise arising from extremely noisy environments like airports, marine engine rooms, power stations and print works
- Double casings technology helps minimise resonance effect
- Large space inside cup helps reduce moisture and heat build-up
- Soft wide cushions help reduce pressure around the ears and improve comfort and wearability





449-3499 H10 SERIES HEADBAND EARMUFFS

449-6528 35DB NECKBAND

774-4000 26DB NECKBAND





UVEX UUNATTACHED DISPOSABLE EAR PLUGS

- · Stored in dispenser
- Detectable metal clip at cord
- · Easy and quick insertion
- Easy handling and correct insertion



uvex

168-1687 26DB (PACK OF 250 PAIRS)

UVEX ULTRAVISION ANTI-MIST SAFETY GOGGLES

- Classic, ergonomic wide-vision goggle with unrestricted side visibility
- · Lenses can be replaced
- Colour of frame: transparent grey
- Clear CA lens
- Reliable UV 380 protection



uvex

185-3495 CLEAR, ANTI-MIST

UVEX ULTRASONIC, SCRATCH RESISTANT ANTI-MIST SAFETY GOGGLES

- Goggles in sporty design, also suitable as overspecs
- Lenses can be changed
- Frame colours: black, grey
- PC lens, clear
- Protection features
- Reliable UV 400 protection



UVEX PHEOS GUARD S ANTI-MIST UV SAFETY GLASSES

- Modern, fashionable looks
- Duo-spherical lens with wide field of vision & scratch-resistant





uvex

195-1556 CLEAR POLYCARBONATE LENS
195-1557 GREY POLYCARBONATE LENS

195-1554 LIGHT GRAY/GRAY FRAME, CLEAR LENS

UVEX SKYGUARD NT ANTI-MIST UV SAFETY GLASSES

- Spectacles with all-round protection
- Frame colours: grey, orange
- · PC lens in clear
- Reliable UV 400 protection





uvex

185-3506 BLUE FRAME CLEAR LENS

185-3507 CLEAR FRAME CLEAR LENS

UVEX LENS CLEANING STATION

- 4 x 9991-000 Tissues
- Tissues are non-abrasive and absorbent
- 1 x 16 fl oz bottle cleaning fluid
- Cleaning station 9991-000
- Unit dimensions 340 mm wide, 480 mm long, 165 mm high



uvex

195-1558 ULTRASONIC SPEC

uvex

130-2349 LENS CLEANING STATION





HI-VIS CONTRAST BOMBER JACKET

- · High visibility
- Weatherproof
- Studded Storm flap
- Zipped
- Detachable hood, sleeves & fur lining
- Fur lines knitted cuffs
- Reflective tape marking
- Waistband
- Taped seams
- · Phone pocket
- Versatile (can be worn 3 different ways)





918-5983	YELLOW/NAVY BOMBER, L
918-5992	YELLOW/NAVY BOMBER, XL
918-6005	ORANGE/NAVY BOMBER JACKET, M
918-6009	ORANGE/NAVY BOMBER JACKET, L
918-6018	ORANGE/NAVY BOMBER JACKET, XL
918-6011	ORANGE/NAVY BOMBER JACKET, XXL

HI-VIS WARSAW EXECUTIVE VEST WAISTCOAT

- Warsaw executive vest waistcoat
- High visibility
- Reflective tape marking increased visibility
- · Contrast panels for dirt protection







141-8177	ORANGE S								
141-8178	ORANGE M								
141-8179	ORANGE L								
141-8183	ORANGE XL		 						
141-8292	ORANGE XXL								
141-8168	YELLOW S								
141-8169	YELLOW M								
141-8170	YELLOW L								
141-8174	YELLOW XL		 						
141-8176	YELLOW XXL		 						

AIR TECH BUMP CAP

- Cooling mesh fabric for increased breathability
- Shock absorption provided by the Inner ABS (acrylonitrile, butadiene and styrene) shell and soft pad
- Reflective piping for increased visibility
- CE certified that conforms with health, safety, and environmental protection standards
- Mid-length peak makes this bump cap suitable for all uses





171-6850 ADJUSTABLE, NAVY

LED BEANIE HAT

- Warm and comfortable acrylic beanie hat
- Features a removable LED front light for superior visibility in low light conditions
- Rechargeable LED can be charged in a USB port





171-6854 NAVY

171-6853 ORANGE

HEAVY DUTY KNEE PADS

- Lightweight
- Waterproof coating
- Heavy-duty durable plastic cap allows the wearer to swivel and slide with little resistance
- Two strong nylon, fully adjustable straps
- Straps fasten with velcro
- Straps are partially elasticated for extra hold





154-851

ADJUSTABLE, ONE SIZE FITS ALL



Confidently measure with our extensive range from industry leading brands you trust for accuracy.

Test & Measurement Highlights

DPI 705E AND DPI 705E-IS HANDHELD PRESSURE INDICATORS

- 48 pressure ranges from ±25 mbar to 1,400 bar (±1.69 psi to 20,000 psi)
- Total 1 year uncertainty 0.05% full scale over -10°C to +50°C
- Remote plug + play pressure and Resistance Temperature Detector sensors
- · DPI705E Safe Area pressure indicator
- · DPI705EIS Hazardous Area pressure indicator





- Druck

201-2871	200 BAR, HAZARDOUS AREA
201-2877	70 BAR, HAZARDOUS AREA
201-2885	2 BAR, HAZARDOUS AREA
201-2870	70 BAR, SAFE AREA
201-2878	350 BAR, SAFE AREA
201-2867	10 BAR, SAFE AREA

NON-CONTACT INFRARED THERMOMETER

- · Medical grade infrared temperature detector
- Designed with a double moulded plastic housing with ergonomic grip for ultimate user comfort and to allow continuous use over extended periods of
- · Built-in laser targeting with a 1 cm to 10 cm measurement range, allows for better and more accurate targeting to ensure optimum measurement accuracy and precise non-contact temperature readings using the Body or Surface Temperature functions
- In Body temperature range of +32°C to +42.5°C with an accuracy of ±0.3°C



201-0210 DT-8806



 Adjusting program (CAL)

 Stainless steel snap link with safety catch and 15 mm aperture

• Up to 200 kg weighing





700-7055 200KG CAPACITY

DATA LOGGERS

- 3 data loggers for monitoring chilled goods, frozen goods and ripening goods
- No setup required. One button press-to-start logging
- Temperature measurement accuracy is ±0.5°C



LASCAR

910-7068 CHILLED GOODS HIGH 8°C LOW 2°C 910-7062 FROZEN GOODS HIGH -16°C LOW -20°C 910-7071 RIPENING GOODS HIGH 14°C LOW 12°C 111-8087 WATERPROOF BAG

KEYSIGHT U1168A STANDARD MULTIMETER TEST LEAD KIT

 Test leads, Test probe (19-mm tips), Test probe (4-mm tips), Alligator Clips, Fine Tip Test Probes, SMT Grabber and Mini Grabber (black only)



KEYSIGHT

760-0373 19MM AND 4MM PROBE TIPS





Food and beverage—work that feeds the world

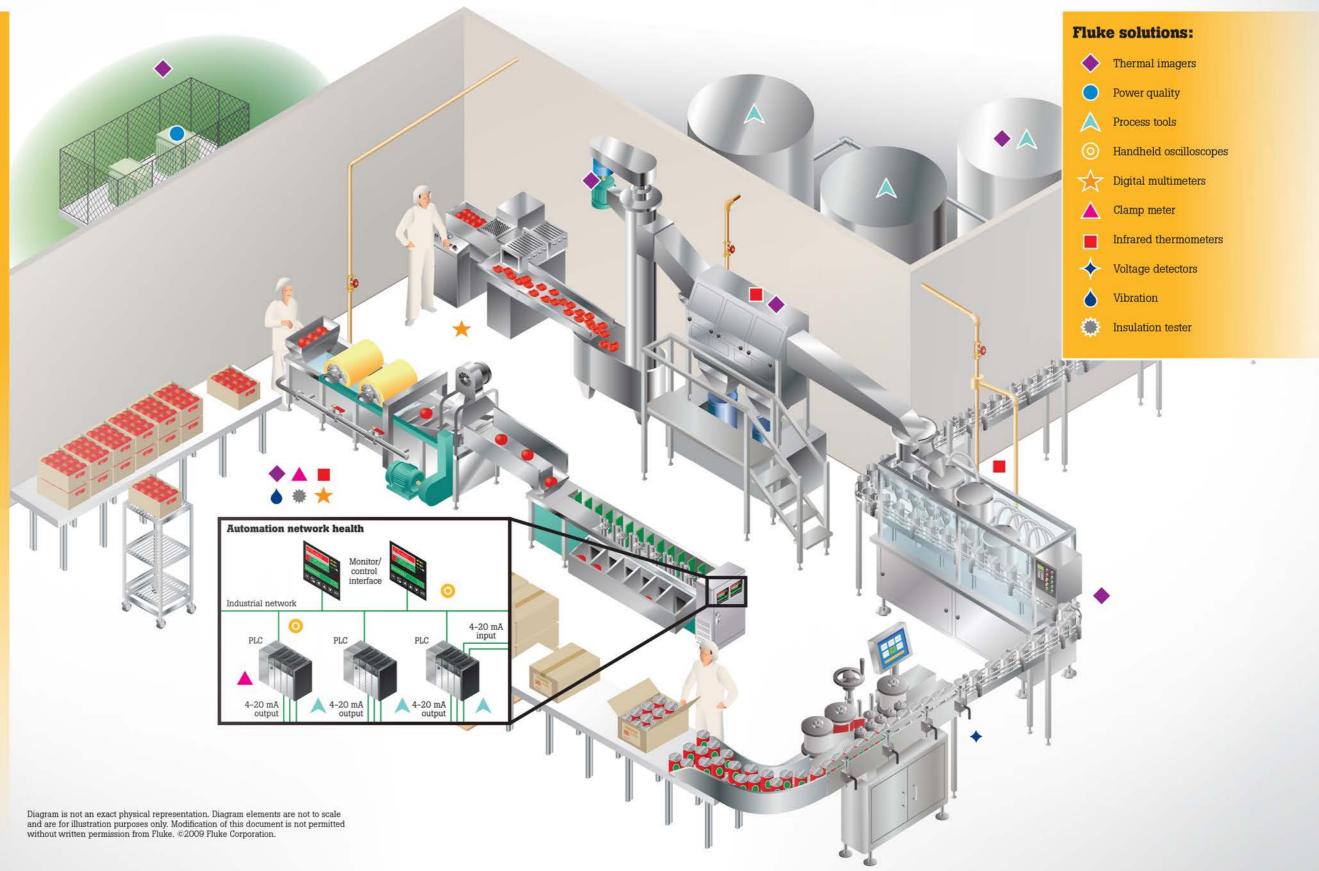
Fluke can help you save time, manage processes and increase productivity

Today's food and beverage manufacturers operate in a pressure cooker. Keeping the lid on production costs and energy expenditures can be a daily challenge. Regulatory requirements, safety issues, and the demands of maintaining uptime add another layer of complexity.

Food and beverage processing plants play a key role in ensuring human health and protecting the environment. They must operate with extreme reliability and precise control of temperature and other operating parameters. At the same time, plant operators face requirements to save on energy costs, operate more efficiently and eliminate accidents.

Fluke has solutions to minimize waste, optimize equipment, prevent downtime and reduce energy consumption. Fluke tools are the industry standard against which other tools are measured.

More information and resources. You can always count on Fluke for the troubleshooting techniques, application information, and training to keep your plant up and running. Visit our web site at www.fluke.com.



FLUKE 773 MILLIAMP PROCESS CLAMP METER

- Measure 4 to 20 mA signals
- without breaking the loop
 Source/simulate 4 to 20 mA signals and 0-10V DC and provide loop power Best in class accuracy of 0.2%
- with 0.01mA resolution and sensitivity



FLUKE

669-3493

FLUKE 754 DOCUMENTING PROCESS CALIBRATOR- HART

- Complete pressure, temperature, and mA loop calibrator
- Troubleshoot and calibrate HART smart digital transmitters
- Create calibration procedures and automatically document results
- · Connect to calibration management software



FLUKE

744-2527

Fluke 377FC / 378 FC Clamp Meters

- The Fluke non-contact voltage true rms AC/DC clamp meter with iFlex use field sense technology to make testing faster and safer, all without touching a live conductor
- Use the iFlex flexible current probe to measure ac current as high as 2500 A. The iFlex probe provides access to large conductors in tight spaces
- The Fluke 378 FC includes a power quality test that provides quick indication of whether an incoming power problem or an equipment problem exists



- Fluke's MAX series are precise and designed to resist a 3 meter drop
- IP54 rated for dust and water resistance
- Absolute maximum temperature measurement +500°C



FLUKE

760-0385

FLUKE 1736 - POWER ENERGY MONITOR & **LOGGER, 4 INPUT CHANNELS**

- Colour LCD display: 4.3in active matrix TFT, 480px x 272px, resistive touch panel
- Voltage range: up to 1000V
- Current range: 4A to 6000A
- Frequency: 42.5 to 69Hz
- Comprehensive logging
- Highest safety rating in the industry: 600 V CAT IV/1000 V CAT III rated for use at the service entrance and downstream
- Interfaces: USB-A, Wi-Fi, Bluetooth, USB-mini



FLUKE

900-9983



FLUKE

220-4445 Fluke 377FC 220-4446 Fluke 378FC



Avoid food scandals by using the right measuring instruments from Testo:

- thermometers
- humidity meters
- WiFi data loggers
- cooking oil testers
- pH meters
- USB data loggers



FOLDAWAY THERMOMETER

- TESTO104

Be sure. test

- · Waterproof folding thermometer ideal for spot check measurements in the food sector
- · Ideal for use with food: HACCP compliant, EN 13485 certified
- · Can be cleaned under running wate
- · Practical folding mechanism with
- rugged metal joint; easy and ready to · Automatic final value recognitio
- (auto-hold); min/max memory for all hold/auto-hold readings





720-3770

FOOD THERMOMETER WITH TOPSAFE - TESTO 106

- The Testo 106 food thermometer is now available as a practical kit with useful accessories including a waterproof case and clip
- Ideal for measuring the core temperature of food: HACCP compliant and EN 13485 certified when used with the TopSafe protective case
- Further benefits which the TopSafe protective case has to offer: waterproof and dirt resistant, IP67 rated, dishwasherproof
- Visual and audible alarm that warn when thresholds are exceeded
- Further benefits which the kit has to offer: you have all the accessories you need, i.e. clip and sensor protective cap for safe storage

ROBUST PENETRATION THERMOMETER - TESTO 105

- · Designed for daily use: rugged, can be protected
- · Changeable measuring tip: standard tip for semi-solid media, i.e. meat / long 200 mm measuring tip for semi-solid media (optional) / measuring tip for frozen food (optional)
- · Two adjustable thresholds, audible / visual alarm that are triggered when thresholds
- EN 13485 and HACCP compliant
- · Probe thermometers are used in the food industry to measure the core temperature of naustry to measure the core temperature or semi-solid media like meat and cheese, for example. That's why they have to be especially rugged and reliable. The testo 105 food thermometer is just that. And more





479-1889

620-9758

INFRARED - THERMOMETERS

INFRARED & PENETRATION THERMOMETER - TESTO 104-IR

- Incoming food, food on display, food in storage: the testo 104-IR infrared probe thermometer allows you to carry out quick and reliable temperature and food safety checks in the course of your busy working day. Ideal for use in the food sector restaurants and the retail industru
- · For carrying out surface and core temperature
- · With integrated probe and infrared laser
- Durable and practical: rugged folding joint, waterproof housing (IP65), fits snugly in any
- HACCP / FN 13485 compliant







- The Testo 831 infrared thermometer allows you to carry out quick and precise temperature measurements of whole pallets of food and smaller products from a distance, Ideal for checking the temperature of incoming goods and for use in food production
- Non-contact, non-invasive temperature measurements due to IR technology
- Precise temperature measurements also of smaller products and from a distance
- Ultra-fast: two measurements per second allows you to scan whole pallets in the blink of
- · Includes 2-point laser measuring spot marking 30:1 optics, belt clip, batteries







MINI DATA LOGGER SET - TESTO 174T

- · The Testo 174T mini data logger for temperature is your practical support for continu temperature measurement (e.g. the storage temperature of drugs or food). When buyin these sets, you also get a USB interface for data transfer to the PC
- · Measurement data memory for 16 000 temperature readings, approx. 500 days of battery life
- Advantage of the set: comes with USB interface for data transfer to the PC
- Waterproof according to IP 65, HACCPcompliant and certified according to EN 12830
- Data analysis: three different software versions available, basic software free to download





TRANSPORT DATA LOGGER: **TESTO 184-T3**

- · With the testo 184 T3 temperature data logger, you can now monito the transport of sensitive products, such as pharmaceuticals, food or electronic items, both safely and conveniently. A start and stop button means the temperature data logger guarantees really easy operation for data recording. At the destination, a glance at the display or the LEDs tells you whether the configured limit values have been adhered to during transport
- Unlimited operating time All in one temperature data logger: PDF measurement data,
- configuration file, acceptance test certificate 3.1 according to DIN ISO 10204 and instruction manual Immediate creation of a PDF report directly after connection
- to a computer
- Monitoring transport in compliance with GxP, 21 CFR Part 11. HACCP and EN 12830



851-3469

DATA LOGGER - TESTO 175-T1

- The Testo 175 T1 set already includes three temperature loggers along with practical accessories for you. This means you have the best possible equipment for recording the temperature in several areas - e.g. in cold, storage and sales areas, such as in butcher's
- readings, battery life of up to 3 years can be achieved
- With this kit, you'll be ready to start straight away: it includes three temperature loggers, ComSoft Basic software for free download, USB interface, SD memory card, lock and wall brackets
- · Practical: you can read the current measuring values, min./max. values, limit values and violations of limit
- values on the logger's display
- HACCP-compliant, EN 12830 certified and protection class IP 65





WIFI DATA LOGGER WITH **INTEGRATED NTC PROBE: TESTO SAVERIS 2-T1**

- The WiFi data logger testo Saveris 2-T1 allows you to monitor the temperatures in refrigerated, work- or storerooms. The temperature values measured with the integrated probe ar reliably recorded over long periods, and transmitted directly to the Testo Cloud (online data store) via your wireless LAN
- You can access these readings at any time, anywhere, using your internet-enabled smartphone, tablet or PC
- · Automated temperature monitoring with integrated probe
- WiFl data logger system with easy installation and operation
- · Call up temperature data at any time via Smartphone, tablet or PC
- · Limit value violation alarms by e-mail or (optionally) SMS



145-0234



OIL TESTER & pH METERS

COOKING OIL TESTER -TESTO 270

- Accuracy is ±2 %TPM (+40 to +190 °C)
- Resolution is 0.5%TPM (104 to 374°F) (+40 to +190 °C), 0.1°F / °C
- Capacitive oil sensor
- · Clear, visual alarm indication via LCD, 2-line highly-visible alarm backlight in
- · Eraonomic design





891-9167

pH METER FOR LIQUIDS -TESTO 206-pH1

- · Perfectly equipped for pH measurement in liquids: the universal testo 206-pH1 pH/temperature measuring instrument features innovative probe technology. Particularly suitable for use in the food sector
- Ideal for measuring the pH value of liquids
- · The integrated temperature probe enables automatic temperature compensation
- Maintenance-free gel electrolyte
- · Robust, waterproof and dishwasher-safe protective case (TopSafe, protection class IP68)





479-8492



DET4TC2 EARTH TESTER

- Automatic P spike and C spike check
- Choice of 2, 3 or 4 terminal measurements
- Clamp input for no-disconnect testing (requires ICLAMP)
- Clamp inputs for stakeless testing (requires ICLAMP and VCLAMP)
- Earth current range (requires ICLAMP)



Megger.

489-664 200KΩ CAT IV 100 V

RCDT310-EN-BS RCD TESTER, RCD TEST TYPE AC SELECTIVE, DC SELECTIVE, RCD TEST CURRENT

- Tests 30mA, 100mA, 300mA and 500mA rated RCDs
- 1/2x I, I, 5x I tests standard, DC and selective RCDs
- 0° or 180° polarity tests on all RCDs
- Selective breakers have a time delay in tripping. When selected, trip test times are extended and a 30s delay is allowed between the measurement of the fault voltage and the application of the test current
- Selectable touch voltage inhibit and touch voltage display on the analogue bargraph



Megger.

712-5737 500MA CAT III 300V

PAT150-AU PAT TESTER

- The PAT150 model has test groups available for Class I, Class II and Extension/Power leads
- Simple Tick/Cross, pass/fail indication plus measurement
 Includes 250 V Insulation and Leakage testing for
- Includes 250 V Insulation and Leakage testing for safe IT testing and surge protected devices
- Testing portable and fixed electrical equipment
 Testing portable and fixed electrical equipment
- 10 mA and 30 mA Portable RCD lead testing
- Adjustable PASS test limits
- Substitute and Mains powered leakage testing
- Tough, rubber armoured with built-in front cover, hardened, scratch proof display window



Megger.

823-0420 CLASS I, CLASS II TEST TYPE

AVO830 HANDHELD DIGITAL MULTIMETER

- IP54 environmental protection
- · Phase rotation
- High / Low sensitivity live circuit detection
- 10 $M\Omega$ / 10 $k\Omega$ input impedance
- MIN / MAX / AVG / Smoothing



Megger.

136-7898

TDR1000/3 TIME DOMAIN REFLECTOMETERS

- Dual cursors providing an instant indication of the distance between two points
- · Auto set up for instant use
- Auto selected output impedance (between 25ohm, 50ohm, 75ohm and 100ohm)
- Ultra-fast pulse for near end fault identification
- Trace HOLD feature to allow comparison between cables
- · Designed for use on all metallic cable pairs



Megger.

764-2825 5000M

MFT1825 MULTIFUNCTION TESTER, EARTH RESISTANCE MEASUREMENT WITH EUROPE MAINS

- Simple colour-coded test selection and large clear backlit display for ease of use
- Two and three wire non-trip loop testing for RCD protected circuits
- Internal memory and Bluetooth® communications
- Type-B RCD and 3-phase RCD testing for industrial applications with no Earth



Megger.

901-1330 1000V

AVO DCM 300E

- Fully IEC1010-1 and IEC101-2-032 compliant for circuits up to 500V phase to phase or 300V phase to earth CAT III or 600V CAT II
- 30mA and 300mA ranges for leakage current measurement
- 0.01mA resolution on 30mA range



Megger.

247-0142

MIT515, INSULATION TESTER

- 10 TΩ (5 kV) / 20 TΩ (10 kV) max. insulation resistance
- Timed IR plus PI and DAR diagnostic tests
- Operate with dead battery when on line power/mains
- Rapid charge Li-ion battery
 up to 6 hrs continuous testina (5 kV)
- Dedicated voltmeter function (30 V to 660 V)
- CATIV 600 V safety rating
- Large LCD display with automatic backlight
- Noise filter rejects up to 3 mA noise



Megger.

765-9586 5000V, 10ΤΩ, CAT IV

MEGGER MIT485, INSULATION TESTER

- Insulation testing up to 500 V and 100 G Ω range in a hand held instrument
- Three wire connection for tip, ring and earth connection
- Gated access to 500 V to prevent accidental damage
- Adjustable insulation test voltage from 10 V to 500 V



Megger₌

122-6797 1000V, 200GΩ





MPQ1000

Power Quality Analyzer

The Megger MPQ1000 Power Quality Analyzer is Class A compliant and rated CAT IV at 600V. It can be used for a wide variety of applications including substation monitoring, equipment and breaker tripping, load studies and balancing as well as for switchgear and component failure.

Some of its features include:

- Automatic CT recognition
- Automatic connection verification
- On-board data analysis
- SD card and USB stick support
- 1000 V ac and dc range
- Scope and DMM modes
- CATIV @ 600 V
- IEC61000-4-30 Class A compliant



TEST TOOLS - MULTIMETERS, THERMOMETERS, CLAMP METERS

FLIR ONE® PRO-SERIES THERMAL IMAGING CAMERA

- The FLIR ONE Pro and FLIR ONE Pro LT give you the power to find invisible problems faster than ever.
- With robust features such as multiple temperature meters and level/ span controls, FLIR ONE Pro cameras work as hard as you do.
- The revolutionary VividIR™ image processing helps you see more details, FLIR MSX® adds sharpness and
 perspective, and the FLIR OneFit™ adjustable connector extends up to 4 mm to fit many popular protective cases.
- Whether you're inspecting electrical panels, looking for HVAC problems, or finding water damage, the FLIR ONE Pro and FLIR ONE Pro LT are tools no serious professional should be without.
- FLIR ONE Pro has a thermal resolution of 19,200 pixels (160 × 120), Thermal sensitivity 70 mK and Object temperature range -20°C to 400°C.
- FLIR ONE Pro LT has a thermal resolution of 4,800 pixels (80 × 60), Thermal sensitivity 100 mK and Object temperature range -20°C to 120°C.





136-8284 FLIR ONE PRO IOS LIGHTNING CONNECTOR
136-8285 FLIR ONE PRO ANDROID USB-C CONNECTOR
136-8286 FLIR ONE PRO ANDROID MICRO-USB CONNECTOR
175-7362 FLIR ONE PRO LT IOS LIGHTNING CONNECTOR
175-7363 FLIR ONE PRO LT ANDROID USB-C CONNECTOR

FLIR EX-SERIES INFRARED CAMERA WITH MSX & WIFI

Easy to use: The FLIR Ex series cameras are fully automatic and focus-free with an
intuitive interface for simple measurements in thermal, visual, or MSX mode.

Compact and rugged: The FLIR Ex series cameras' low weight of 0.575 kg and the
accessory belt pouch make them easy to bring along at all times. Their rugged design
can withstand a 2 m drop test, and ensures reliability, even in harsh environments.

- Ground breaking affordability: The FLIR Ex series cameras are the most affordable infrared cameras on the market
- Convenient to share images and findings: Download images, create reports, and share what you've found instantly



TELEDYNE FLIR Everywhereyouloo

184-6121 INFRARED CAMERA TEMP RANGE -20°C TO 400°C, IR RESOLUTION 160 x 120 (19,200 PIXELS)

184-6123 INFRARED CAMERA TEMP RANGE -20°C TO 550°C, IR RESOLUTION 240 x 180 (43,200 PIXELS)

184-6124 INFRARED CAMERA TEMP RANGE -20°C TO 550°C, IR RESOLUTION 320 x 240 (76,800 PIXELS)

135-3291 REPLACEMENT BATTERY FOR EX SERIES

848-1384 REPLACEMENT BATTERY CHARGER POWER SUPPLY FOR EX SERIES

FLIR CM74 600A AC/DC CLAMP METER

- With built-in, high-power dual-LED worklights the FLIR CM74 AC/DC clamp meter provides extra illumination for environments with little or no light.
- Readings are clearly visible on the large digit backlit LCD display, ideal for dark spaces.
- Compact and lightweight the FLIR CM74 easily fits in your pocket, overalls or toolbox





922-6232 CM74 600A AC/DC CLAMP METER

123-6702 ACCESSORY - FLEXIBLE CLAMP ADAPTOR (10", 25CM)

123-6703 ACCESSORY - SOFT-SIDED CARRYING CASE

FLIR TG54 SPOT IR (INFRARED) THERMOMETER

- Precise, non-contact measurements of temperature
- 1.45"" TFT LCD screen
- Rugged, industrial casing will withstand a drop of up to 3m
- High/low visual alarms
- Built-in laser targeting system makes it easy to identify the measurement point
- 128 x 128 pixels
- -30°C to 650°C (-22°F to 1202°F) temperature rang
- 24:1 distanceto-spot ratio
- IP56 rating





922-8759 SPOT INFRARED THERMOMETER

FLIR VT8 VOLTAGE, CURRENT & CONTINUITY TESTER

- The FLIR VT8's optimized and open-jaw design allows it to fit into tight spaces and reliably measure largediameter cables.
- Extensive measurement features make the FLIR VT8 a versatile tool – just one meter can get the job done.
- Carry the compact tester in your pocket to be ready at any moment for easy troubleshooting.





181-2427 200 A, 1000 V **181-2426** 100 A, 600 V

123-6703 SOFT CASE





RS 135 MULTI FUNCTION CALIBRATOR

- Source 4-20 mA, 0-24 mA with 1 μ A resolution (1 K Ω load, 24 V loop supply), basic accuracy 0.025%
- Source 0~24.000 V with 1 mV resolution
- Source frequency 1~20000 Hz square wave with programmable duty cycle (1~99%)
- Auto step and auto ramp for sourcing mA, V
- Easy fixed 25% up and down, or programmable percentage (1~99%) increase and decrease (mAV)
- Measure DC mA with loop power (24 V output)
- Measure DC V
- · Measure Temperature (°C, °F) of 11 types of thermocouples (K, J, E, T, R, S, N, L, U, B and C)
- Calibrator grade precision temperature measurement with 0.1°C & 0.1°F resolution
- Detection of thermocouples disconnection
- · Warning for overload, output open (mA) or short (V)
- · Short circuit protection for output
- Battery power indication (%) when turn on the calibrator
- · Battery or electrical power supply



2888

174-9557 4-20MA LOOP CALIBRATOR + THERMOMETER

BLUETOOTH POWER CLAMP METER

- 10,000 count digital display
- 50 segment analogue bar graph
- Large LED backlit display
- Bluetooth connecting
- Auto store up to 1000 memories
- Data logging up to 9,999 records
- True RMS reading on AC and AC+DC mode
- · Torch lightening on trigger push
- · Auto Ohms/Continuity/Diode selection AC 600 Amps capability
- Auto AC/DC 1000 Volts capability and selection
- AC current via flexible current probe
- · Power and power factor measurement
- · Total harmonics distortion and harmonics 1 to 25
- · Phase rotation indication
- 100K Ohms resistance capability
- Frequency counter
- · Capacitance capability
- · Smart data hold, peak hold, min max hold functions
- · Inrush current



162-4455 RS PRO 155 BLUETOOTH CLAMP MULTIMETER







375-5422 MAGNETIC STICK FIELD INDICATOR

ATEX/IECEX MAGNET STICK INDICATOR

- Easy to use
- Powerful red light indicator
- Lightweight
- Ambient Temperature: -20°C to +40°C
- Weight: 40 gms





ATEX/IECEX MAGNET STICK INDICATOR

TEMPERATURE, SPEED & ENVIRONMENTAL TEST & MEASUREMENT



INFRARED THERMOMETER WITH DUAL LASER POINT

- Ergonomic grip for ultimate user comfort and to allow continuous use over extended periods of time
- Built-in dual-laser targeting for better and more accurate targeting to ensure optimum measurement accuracy and precise non-contact temperature readings
- Temperature range of -50°C to +550°C with an accuracy of ± 1 % of the reading at 20°C to 300°C (includes a userselectable option for reading in Celsius or Fahrenheit)
- Relative humidity range for this device is 0-90%RH and also features a digitally adjustable emissivity feature from 0.10 to 1.0 $\,$
- LCD display with a backlight





193-8691 RS-8861

DRY-WELL TEMPERATURE CALIBRATOR

- · Suitable for checking the accuracy of (Resistance Temperature Detectors), thermocouples, and small bimetal thermometers in the field
- Fast, accurate and easy calibrations of temperature sensors for reliable measurement results
- Multiple sized sensor holes that accepts a wide range of temperature sensor diameters, for increased versatility across a wide variety of applications
- Built-in fan cooling feature allows rapid temperature changes and the temperature can be adjusted in 0.1°C increments if



193-8701 BX-150 +33°C TO +300°C

CONTACT AND NON-CONTACT TACHOMETER

- Durable and robust housing for use in challenging environments while offering an intuitive and easy to use interface for optimum ease of use
- · A wide measuring range and high resolution for accurate and reliable results as a contact or non-contact form of measurement
- A solution for non-invasive ways of measuring RPM and surface speed, especially in areas where it may be dangerous or difficult for the user to reach





RS PRO SURFACE TEMPERATURE PROBE

- Maximum temperature of +1100°C
- Probe length of 210mm
- · Probe diameter of 12 mm
- The disc is contained within a ceramic outer sheath



342-8978 TEMPERATURE PROBE, TYPE K, MAX.

DESKTOP INDOOR AIR QUALITY CO2 MONITOR

- · High-quality CO2 monitor with a large LCD display for easy visual identification
- Real-time readings for accurate monitoring and detection
- Also measures immediate air temperature and humidity
- Compact and ergonomic design, suitable for use in workspaces where there is limited space
- This portable CO2 monitor can be used to observe and control CO2 levels indoors
- Automatic shutdown if the device has a low battery or if it is left idle for more than 10 minutes





174-6574 RS-967

RS PRO IT-1 INFRARED THERMOMETER

- Single Type K bead thermocouple supplied
- K or J-Type thermocouple input
- Real-time stamp
- Data logging up to 16000 records
- °C, °F or °K display so you switch between Celsius, Fahrenheit and Kelvin
- Auto Power Off with selectable time





123-3217 RS53II SERIES

LUX/FC LIGHT METER ILM-201L

- Measuring range: 200, 2000, 20 000, 200 000 lux; 20, 200, 2000, 20 000 foot-candles
- Accuracy ±3% (calibrated to standard incandescent lamp 2856 oK) and corrected LED day whitelight spectrum (±8% other visible light source)
- 3 digits LCD with maximum reading 1999
- Max Hold
- Manual zero adjustment
- Manual ranging Meter size 130 x 55 x 38 mm Sensor size 80 x 55 x 25 mm





124-0938 LUX/FC LED LIGHT METER

TACHOMETER REFLECTIVE TAPE

- · Self-adhesive reflective tape
- · Suitable for use with optical tachometers and stroboscopes
- · RoHS (Restriction of Hazardous Materials) compliant with EU Directives 2011/65/EU and 2015/863
- Complies with the ΔNSI/ESD S20.20:2014 and BS EN 61340-5-1:2007 Electrostatic Control Standards





845-9731 PACK OF 10









IPS SERIES MULTIPLE OUTPUT PROGRAMMABLE LINEAR DC POWER SUPPLIES

- 2,3, and 4 Independent isolated output
- User-friendly operation, coarse/fine volume control
- · USB standard interface
- · Low noise achieved by a smart cooling fan achieving
- Digital panel control (rotary encoder switch, rubber key with indicator)
- Tracking series and parallel mode The tracking series mode guarantees higher output voltage, while the tracking parallel mode guarantees higher output current.



METRIC EXTERNAL

MICROMETER SET

• Resolution of 0.01 mm

• Accuracy of ±0.004 mm

rods and adjustment tools

• External metric micrometer set

• Minimum measurement of 0 mm

• Maximum measurement of 150 mm

Set contains six micrometers, setting



123-3558 2CH,180W PROGRAMMABLE LINEAR DC P/S

EXTERNAL DIGITAL MICROMETER

- External, digital micrometer
- · Metric and imperial units
- Minimum measurement of 0 mm
- Maximum measurement of 25 mm
- Resolution of 0.001 mm
- Accuracy of ±0.002 mm
- Electronic LCD screen
- · Battery operated





705-1229 0-25MM/0-1IN



705-1213 0 MM →150 MM

CYLINDERS WITH PRINTED GRADUATIONS (CLASS B)

- ISO 6706 compliant cylinders in ultra-clear PP
- Enhanced pin-sharp blue-printed graduations
- Polypropylene bottles with good chemical resistance
- Stable hexagonal base with an anti-suction design that prevents the base from sticking to a wet surface



461-0910	2000ML
461-0904	1000ML
461-0881	500ML
461-0875	250ML
461-0869	100ML (PACK OF 5)
461-0853	50ML (PACK OF 10)
461-0847	25ML (PACK OF 10)
461-0831	10ML (PACK OF 10)

DIGITAL CALIPER

- · Clear LCD display
- Stainless Steel construction
- Origin setting
- Switchable On/Off
- Thumbwheel for fine adjustment
- Knurled locking screw
- Supplied with battery



841-2518	150MM/6"
841-2511	200MM/8"
841-2515	300MM/12"

TUBULAR ROD INSIDE MICROMETER

- Accuracies of 0.01mm.
- · Ranges of 50 to 600mm.
- Non-glare satin chrome barrel and sleeve.
- Each set consists of a micrometer head with locking screw.





785-7847 50-250MM

PRESSOL MEASURE JUG WITH LID AND FLEX SPOUT

- Flexible spout and lid
- Oil, acid and fuel resistant
- Ergonomic design
- Durable and stable
 German English an
- German, English and American scale divisions



R5	,
PRO	

703-1102		
703-1105	2L	
703-1109	3L	
703-1118	5L	



All the components you need to keep your employees safe on site.

Site Safety Highlights

SPILL CONTROL PALLET

- Prestige, Double IBC polyethylene spill pallet
- Fully sealed, moulded bund
- Extra grip plastic grating, holds the IBC's clear of spillages.
- Plastic grating will hold 2 fully loaded IBC's Extra tough poly construction will resist knocks and direct impacts
- · Will hold a combination of 205ltr drums and IBC's
- Suitable for storing 2 # IBC, 8 # 205 litre drums or a combination of both
- Safe working load capacity 4000Kg



RAMPMAT SLIP RESISTANT RUBBER FLOOR MAT

- Loose lay floor mat
- · Open raised circular surface
- Moulded bevelled Edge
- Anti-fatigue
- Slip resistant tested;
- Made from NBR rubber
- Suitable for dry and wet environments
- Pile height 10mm;Temperature range -20°C to +130°C

872-5643 0.8M X 1.2M

DOOR RELEASE

saves installation time

Anti-tamper facility to reduce false

operation

· Surface mounting

• Green MCP, double pole, surface

mounted with glass Break glass

• Unique plug and play concept

- Easy to clean
- Economical



BUBBLEMAT

- Interlocking tile version of bubble surface mat
- Three modules can be linked together to cover any shaped area.
- Raised bubbled surface to stimulate blood circulation.
- Soft but sturdy rubber material offers comfort from cold hard concrete floors.





159-6164 50CM X 50CM MIDDLE

C Lubetech

177-2741 SPILL PALLET

TELESCOPIC EXTENSION ACCESS POLE

- Access poles provide access to detectors which are out of normal reach
- Lightweight and quick to extend and are made of non-conducting fibre glass construction.
- · Non-whip even at height
- Certified non-conductive protecting both the engineer and overhead live equipment from inadvertent shorts
- Designed for use with the Solo aerosol dispenser and detector removal tool.





513-6968 REPLACEMENT GLASS (PACK OF 5)

513-6974 TEST KEY (PACK OF 10)

PE DRIP TRAY

- Ideal choice for containing spills in the work area, storing, handling smaller drums and cans.
- Compact, lightweight and fit into small area.
- Made from 100% polythylene, they're also stronge and there compatible with most liquids.
- Practical, simple and safe solutions for handling small liquids and spillages.





192-7769 57CM X 39CM X 5CM 10L

192-7768 79CM X 40CM X 5CM 9L



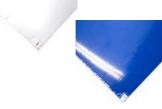


FLOORING & MATS

FIRST STEP CARPET, HARD FLOOR, FLOOR PROTECTION x 450(w) 1.2m (l) 1.5mm THICK

- · An economical solution to contamination control
- · Manufactured from an anti-microbial
- agent
 Protects against the growth of organisms such as bacteria, mould and mildew

 Adhesive coated surface captures
- dirt and dust particles



446-364

446-370

ANTI-SLIP, DOOR MAT, CARPET, **INDOOR USU**

- All round high performance doormat
- Heavy-duty polypropylene loop pile surface
- · Raised reinforced 'waffle' pattern scrapes dirt
- Exceptional moisture wiping properties lipped edges retain up to 5.4 litres water/m2
- Rubber backing holds the mat in place
- Pile material: Polypropylene
- Backing: anti-slip rubber





Black - 900mm x 600mm x 7mm

159-6177 Blue - 900mm x 600mm x 7mm

Greu - 900mm x 600mm x 7mm

159-6178 Blue - 1.5m x 600 x 7mm

HYGIMAT HYG01 INDIVIDUAL ANTI-FATIGUE MAT

- The mat is made of rubberised gel
- Operating temperature ranges from -5°C to +80°C
- · The mat is generally resistant to
- It is suitable for dry and wet environments, indoors or outdoors
- Loose lay installation method





197-4317	0.6M X 0.9M
197-4318	0.9M X 1.5M
197-4319	0.9M X 1.8M

RAMPMAT INDIVIDUAL RUBBER ANTI-FATIGUE MAT

- Loose lay floor mat
- Open raised circular surface
- Moulded bevelled Edge
- Anti-fatigue
- Slip resistant tested
 Suitable for dry and wet environments
- Pile height 10mm Temperature range -20°C to +130°C
- Easy to clean



762-1522 Rubber - 900mm x 1.5m x 10mm

872-5681 Nitrile Rubber - 850mm x 1.5m x 9mm

VYNAPLUS ANTI-SLIP, DOOR MAT, CARPET, INDOOR USE, **BLACK/GREY**

- Economical
- · Excellent all round performance
- · Slip resistant (door mat stays in place)
- · Stain resistant
- · Scraping surface
- PVC Backing
- Cutpile surface finish Scrapes away and traps dirt, debris, dust



U00-1191 600m, 900m, 7mm 900m 12m 7mm 464-996 900m, 1,5m, 7mm

464-980 1.2m, 1.8m, 7mm

HYGIMET HYS01 INDIVIDUAL ANTI-FATIGUE MAT

- The Coba Plastics Hygimat is a revolutionary hygienic anti-fatigue mat.
- The mat is made of rubberised gel foam
- Operating temperature ranges from -5°C to +80°C
- · The mat is generally resistant to chemicals
- · It is suitable for dry and wet environments, indoors or outdoors Loose lay installation method



197-4314 0 6M X 0 9M 197-4315 0.9M X 1.5M

197-4316 0.9M X 1.8M

OCP01 ROLL ANTI-FATIGUE MAT

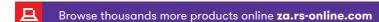
- NThe Coba Plastics Orthomat Thicker foam anti-fatigue mat for dry workplaces
- · It can be used in different sectors such as Production lines, Assembly areas, Packing stations, Workbenches
- · Operating temperature range from 0°C to +60°C
- · It is suitable for dry indoor environments
- · Pebble surface finish
- · Enclose against cold concrete



197-4320 0.6M X 0.9M **197-4321** 0.9M X 1.5M









Entra-Clean HygienePlus The washable doormat that actively kills germs

- Removes visible dirt and kills invisible microbes. HygienePlus means the mat is treated with the EU-registered biocide, BI-OME registered with OEKO-TEX® an antimicrobial and virus reducing technology. BI-OME works by effectively killing bacteria when contact is made with the mat. • Although the treatment is a highly effective antimicrobial agent, it does not cause any skin irritations. • A new concept in entrance matting. • Improve floor level hygiene around your business – important whilst fighting Covid-19 and beyond. • More sustainable - less frequent washing required, and on lower temperatures. • Free of metals.
- Fully machine washable with no reduction in active cleaning power for the life of the mat. • Suitable for all facilities, in particular offices, hotels and leisure, retirement homes and healthcare settings. • Reduces annoying odours caused by bacteria and funghi.



Elimination of bacteria



Cleanliness on a microbial level







EMERGENCY LIGHTING



EMERGI-LITE LED EMERGENCY LIGHTING, SURFACEMOUNT

- 5 year warranty
- LED technology 100,000 hours plus lamp life
- Low power consumption and LED light source for reduced operation and maintenance costs



IT EMERGI-LITE

193-8291 EMERGENCY LIGHTING

RS PRO LED EMERGENCY LIGHTING, BATTEN

- LED lighting
- Single or twin tubes
- Weatherproof
- Maintained emergency lighting
- Energy savings of up to 50%, compared to fluorescent fittings





210-5493

EM 4500 LUMENS

210-5498 EM 4500 LUMENS WITH MOTION DETECT SENSOR

RS PRO ROUND LED BULKHEAD LIGHT

- 15.5W Power consumption LED gear tray 5000K die-cast aluminium base and cover
- Opal polycarbonate diffuser Steel gear tray





795-9805 15.5 W

RS PRO LED EMERGENCY LIGHTING, **4 W, MAINTAINED**

- 4 W SMD LED's
- Both wall and ceiling mounted
- Maintained and non-maintained
 Protection Rating: IP20
- · Lifetime hours: 30 000





125-8557

RS PRO ROUND LED BULKHEAD LIGHT

4W

- Beam angle is 120°
- Ceiling and wall mountable
- Charging time is 24 hours
- Light colour is warm/cool/daylight
- · Luminous efficiency is 75Lm/W





18 W, 220 → 240 V ac 188-3519

188-3518 18 W, 220 \rightarrow 240 V ac

RS PRO FLOODLIGHT, 1 LED

- PIR Sensor 10m range
- Good heat dissipation performance.
- IP65 ratingService life over 50000 hours





FLOODLIGHT, 1 LED, 10 W, $800 \rightarrow 900 \text{ LM R } 928.12$





MOFLASH INTRINSICALLY SAFE LED SOUNDER/ BEACON - IS-SB SERIES

- Suitable for fire, security, process control and general signalling applications
- The sounder/beacons incorporate a two stage alarm option
- Zones 0, 1, 2, 20, 21 and 22 ATEX and IECEx approved
- IP66 rated
- · Surface Mount
- Polycarbonate housing material



MOFLASH'

144-5953 IS-SB SOUNDER BEACON, AMBER LED

24 V DC

144-5954 IS-SB SOUNDER BEACON

RED LED, 24 V DC

MOFLASH DUAL FUNCTION LED BEACON - LED80 SERIES

- 12 extra-bright LED's
- · Continuously-rated
- UV-stable polycarbonate lens and body
- Wide operating voltage
- 180° visibility
- Easy, snap-fit installation (with base plate for surface mounbt option)
- May be used in genaral signalling applications



MOFLASH*	
721-6423	LED, MULTIPLE EFFECT BEACON LED 80 SERIES, AMBER, SURFACE MOUNT, - 10 → 100 V DC
721-6432	LED, MULTIPLE EFFECT BEACON LED 80 SERIES, RED, SURFACE MOUNT, 10 → 100 V DC
721-6435	LED, MULTIPLE EFFECT BEACON LED 80 SERIES, BLUE, SURFACE MOUNT, 10 → 100 V DC
721-6439	LED, MULTIPLE EFFECT BEACON LED 80 SERIES, GREEN, SURFACE MOUNT, 10 → 100 V DC
721-6448	LED, MULTIPLE EFFECT BEACON LED 80 SERIES, AMBER, SURFACE

721-6441 LED, MULTIPLE EFFECT BEACON LED 80 SERIES, RED, SURFACE MOUNT, 115 V AC, 230 V AC

721-6445 LED, MULTIPLE EFFECT BEACON LED 80 SERIES, BLUE, SURFACE MOUNT, 115 V AC, 230 V AC

721-6454 LED, MULTIPLE EFFECT BEACON
LED 80 SERIES, GREEN, SURFACE
MOUNT. 115 V AC. 230 V AC

32 TONE SOUNDER - IS-S SERIES

- The sounders incorporate a two stage alarm with a total of 32 selectable tones
- Zones 0, 1, 2, 20, 21 and 22 ATEX and IECEx approved
- IP66 rated
- · Surface Mount
- · Polycarbonate housing material



MOFLASH

144-5950 IS-S BASE SOUNDER, 105DB, 24 V DC

MOFLASH INDUSTRIAL ECO LED BEACONS WITH PIEZO BUZZER -LEDA100 SERIES

- Dual function, flashing or continuous (static) mode
- 80 dB piezo buzzer which only activates with the flashing mode
- Continuously rated
- LED long life
- · Low current consumption
- Suitable for surface, conduit box or wall mounting
- 3 point fixing
- 360° light output around the vertical axis
- Dustproof and weatherproof
- UV stable polycarbonate lens
- UV stable ABS plastic base
 160 flashes per minute (FPM)

865-1625 LEDA100 BUZZER BEACON.

- IP65 protection
- RoHS compliant
- CE Marked



MOFLASH'

	AMBER LED, 8 → 20 V, AC/DC
865-1634	LEDA100 BUZZER BEACON,
	RED LED, 8 → 20 V AC/DC
865-1637	LEDA100 BUZZER BEACON, GREEN LED, 8 → 20 V, AC/DC
865-1631	LEDA100 BUZZER BEACON, AMBER LED, 20 → 30 V ,AC/DC
865-1647	LEDA100 BUZZER BEACON, AMBER LED, 40 → 380 V ,DC, 85 → 285 V AC
865-1659	LEDA100 BUZZER BEACON, GREEN LED, 40 → 380 V, DC, 85 → 285 V AC
721-6479	LEDA125 SOUNDER BEACON, 90DB, CLEAR LED, 24, V DC

MOFLASH INTRINSICALLY SAFE BEACON - IS-B SERIES

- The beacons incorporate a dip switch that allows you to change from 1 Hz flash rate to a static signal
- Zones 0, 1, 2, 20, 21 and 22 ATEX and IECEx approved
- IP66 rated
- Surface Mount
- Polycarbonate housing material



MOFLASH'

144-5951 IS-B BEACON, AMBER LED, 24 V DC

MOFLASH TLM MODULAR SIGNAL TOWER

- Beacon units are dual function, flashing or continuous (static) mode
- Sounder unit output: 80 120 dB
- Continuously rated
- LED long life
- · Low current consumption
- Suitable for surface mounting
- 360° light output around the vertical axis
- Dustproof and weatherproof
- UV stable polycarbonate lens
- UV stable ABS plastic base
- 60 flashes per minute (FPM)
- IP54/65 protection
- RoHS compliant
- CE Marked





MOFLASH

865-1722	LED-TLM BEACON UNIT, AMBER LED, STEADY LIGHT ,EFFECT, 24 V DC
865-1726	LED-TLM BEACON UNIT, RED LED, STEADY LIGHT, EFFECT, 24 V DC
865-1744	LED-TLM SOUNDER UNIT, , 24 V DC
865-1757	LED-TLM TERMINAL UNIT, TERMINATION UNIT
901-0722	LED-MINI BEACON UNIT, AMBER LED, STEADY LIGHT, EFFECT, 12 → 24 V DC
901-0747	MOUNTING BRACKET & POLE FOR USE WITH LED-MINI
901-0738	MOUNTING FOOT & POLE

FOR USE WITH LED-MINI







Efficiently solving design problems with

DesignSpark Mechanical v5.0

DesignSpark Mechanical software has just been upgraded to DSM v5.0

with a host of features that improve usability and design efficiency:

- User customisable shortcuts
- Custom rendering
- Flythrough display
- Improved sketching with equations and a 2D constraint-based mode
- Mass properties that better supports calculations for 3D printing

Engineers looking for extended features such as import & export of IGES format files, support for STEP files, GD&T annotations, customised drawing sheets, perspective modification on 2D drawings from 3D objects are supported too. Drawing and Exchange add-on packages add just the features you need and can be purchased individually, or as a bundle.

Download DSM v5 for free

Explore the extended features of DSM add-ons



Your go-to design engineering platform

www.rs-online.com/designspark/home



SAFE DISTANCING BUNDLE

- Introducing the RS PRO Social Distancing Kit that includes everything needed to set up and manage social distancing within a variety of environments
- It includes an infrared thermometer, a 2 m safety barrier and footprint-shaped floor labels as clear markers to indicate the correct distance



PRD

201-3047 SAFE DISTANCING BUNDLE

LOCKOUT STARTER KIT

- An essential addition to any workplace, this starter kit is from our high-quality own brand RS PRO, offering machine, electrics and worker protection
- Basic lockout for valves and electrical panels





862-5247 24 PRODUCTS

AREA SIGNAGE BUNDLE

 This RS PRO area signage kit is essential to ensure clear and consistent floor markings to highlight walkways, safe spacing and working areas in a variety of environments





201-3589 AREA SIGNAGE KIT

SHADOW BOARDS KITS

- The RS PRO cleaning shadow board kit contains all the essential tools to maintain exceptional hygiene standards in a range of different environments
- Using a shadow board also helps quickly identify missing equipment, whilst providing a neat and tidy storage place when not in use



PRO

 201-3132
 STYLE A (BLUE)

 201-3133
 STYLE A (RED)

 201-3134
 STYLE B (BLUE)

 201-3135
 STYLE B (RED)

ZONE WORKING BUNDLE

 The RS PRO zone working kit is an ideal solution to use for establishing clearly marked work zones for individual workers and removing the potential health and safety risk of employees being in close proximity of each other while working in busy manufacturing or industrial environments



201-3136 ZONE WORKING KIT









FULL DOME MIRROR 360 DEGREE VIEWING

- 4 way intersection
- · Panoramic viewing
- Edge is rubber material
- Excellent visibility



773-9714 DIA 60 CM

HEAVY DUTY RUBBER WHEEL CHOCK

- Stops wheels from moving during critical maintenance work.
- Made from a thick rubber to ensure a long life.
- Integrated handle for easy removal and carrying.
- Ideal for all types of automotive work. Trucks, vans and cars are all supported.



PRO

125-2183 HEAVY DUTY WHEEL CHOCK

FOR TRUCKS

FORKLIFT TRUCK AREA FLOOR SIGN

- · Permanent adhesive fixing
- Graphics printed on the underside of clear PVC film to withstand everyday warehouse traffic
- Material PVC



PRO

873-5921 430MM DIA

ANGLES PROTECTION WITH TAPE

- Angles protection for protecting people, vehicles or equipment
- Ideal for warehouses, factories, parking
- Double Adhesive backed tape
- Nitrile Butadiene Rubber doubleface tape for fixing oil and grease resistant
- High visibility
- Black/Yellow
- Available in square, rounded or flat



724-9782 ANGLE PROTECTION 30X30X8MM
724-9766 ANGLE PROTECTION Ø40MM 750MM
724-9779 ANGLE PROTECTION Ø40MM 750MM
724-9808 PLATE PROTECTION 60X10MM 5M

724-9798 PLATE PROTECTION 60X10MM 750MM

WARNING CONES

- · Class 1 reflective cone
- Made of polypropylene very durable
- Two reflective stripes highly visible even in the dark
- · Colour: orange and white
- General use cone optional chain or hook can be attached
- Easy to use just place them where you want them, no need to connect them





503-681 30 CM

DEFIBRILLATOR (AED) LOCKABLE WALL CABINET

- The cabinet door is clear which allows visual inspection without needing to pent the cabinet
- Built-in shelf provides space for storage of extra supplies
- Lockable to keep your defibrillator secure
- Mounting holes have been pre-drilled into the cabinet for an easy in:





901-1359

WALL MOUNT BARRIER

- Centrifugal braking prevents belt retracting at excessive speed
- Flexible retractable barrier doesn't take up valuable floor space
- 48 mm webbing
- · Closes off service or entry points





829-9075 CAUTION-DO NOT ENTER WEBBING

ISO 7010 VINYL PICTOGRAM SIGNS

• 100X100MM



PRO

813-4454 CRUSHING OF HANDS SIGN

813-4423 ELECTRICITY SIGN

813-4463 FLAMMABLE MATERIAL SIGN

813-4445 HOT SURFACE SIGN **813-4502** NO SMOKING SIGN

813-4473 WEAR EAR PROTECTION SIGN



Essentials to keep your work space and equiptment to the highest of hygine standards.

Facilities Cleaning & Maintenance Highlights

FOODLUBE

- · Specialist food grade lubricants
- Technically advanced lubricants developed by chemists and engineers to meet customer needs.
- · Reduce production downtime
- · Avoid costly product recalls
- · Support audit compliance









691-353 SPRAY LUBRICANT, 300ML AEROSOL 146-2963 ANTI-SEIZE AND THREAD COMPOUND FOR FOOD PROCESSING MACHINERY 500G 375-8285 UNIVERSAL 2 LUBRICANT, 380GM 375-8279 UNIVERSAL 2 LUBRICANT, 4KG TIN 448-0719 SUGAR DISSOLVING FLUID.500ML 512-6062 EXTREME MULTI-PURPOSE EP GREASE, 380G 512-7784 FOOD GRADE WATER DISPLACING AND LUBRICANT SPRAY, 300ML 733-5029 ULTRA NLGI NO. 2, 380G

FOOD SAFE LUBRICANT

- · Non-toxic white grease
- · Excellent resistance to water and high temperatures
- Excellent compatibility with rubbers and plastics
- Good operating temperature range -20°C to +180°C



CLEANING SOLVENT

- · Excellent degreasing properties
- · Ideal for efficient cleaning
- Removes flux residues and acrulic conformal coatinas
- Versatile in use
- · Fast evaporation rate
- · Efficient cleaning
- CO2 propelled aerosol version available
- · 20% more active cleaner



ELECTROLUBE

379-4994 400 ML

AEROSOL ELECTRICAL CONTACT CLEANER

- · Leaves no residue
- · No ozone-depleting action
- · Non-corrosive
- · Contains corrosion inhibitor
- · Provides long-lasting lubrication
- Safe on all metal surfaces does not stain
- Safe on most rubbers. plastics, and coatings.
- Convenient 360° (including inverted position) spray valve for aerosols
- · High purity CO2 propellant, giving an active product content of 95%





823-2533 500ML

KARCHER VACUUM **BAKERY KIT**

- · Accessory kit for vacuuming and cleaning bakeries, equipment, shelves, etc.
- · Ideal for bakeries, cake shops, etc.
- The kit includes: 4 m electrically conductive suction hose (6.906-546.0), electricaaly conductive plastic bend (5.032-4270), 2x 0.5 m metal suction tube (6.900-275.0), crevice tool (6.903-033.0), floor tool (6.906-554.0), car vacuuming tool (6.906-108.0), allpurpose brush (2.863-147.0), suction brush with natural bristles (6.903-862.0), reducer (5.407-109.0).



707-3645 FOR NT 55/1 ECO BS



ELECTROLUBE 344-0344 400 ML



CRC LUBRICANT 500 ml PERMA-LOCK BELT GRIP

- Attached secure spray straw gives more control on application and gives access to hard to reach parts
- Locked on actuator cannot detach
- Reduces squeaking noise from slipping belts
- Creates a water resistant film





123-4856

CRC LUBRICANT 500 ml PERMA-LOCK MULTI OIL

- · Non-slip grip
- · Precision spray with straw up
- Broad spray with straw down
- Catch curb
- · No loose straw as locks into place
- Provides a water repellent film
- · Does not contain silicone
- Works over a wide range of temperatures from -20°C to 150°C
- · Safe to use on paints, woods or plastics





123-4860

CRC LUBRICANT HIGH PERFORMANCE 500 ml PERMA-LOCK CHAIN LUBE

NSF registration for use in the food industry:

- High temperature resistance
- Provides long lasting lubrication
- High flash point for application safety
- · Non corrosive
- · Contains PTFE for extra lubricity
- Applications
- Handling equipment
- · Open drive mechanisms





182-6350

CRC LUBRICANT 500 ml **PERMA-LOCK DRY LUBE**

- Attached secure spray straw gives more control on application and gives access to hard to reach parts
- · Locked on actuator cannot detach
- · High temperature resistance
- Insoluble in water
- Non-oily





123-4857

CRC FOOD SAFE ANTI-SEIZE NON-SILICONE 500 ml PERMA-LOCK PEN OIL

- · Non-slip grip
- · Precision spray with straw up
- Broad spray with straw down
- · Catch curb
- · No loose straw as locks into place
- · Disperses rust, scale and other oxides
- Reduces scrap rate of seized parts





123-4861

CRC 500 ml AEROSOL CONTACT CLEANER

- No ozone-depleting action (ODP = 0,00)
- · Reduces contact resistance, arcing and
- · Extends the life of sensitive equipment
- Safe on commonly used plastics, rubbers and coatings
- Convenient 360° (upside-down) spray valve for aero sols · High purity CO2 propellant, giving an
- active product content of 97%





823-2628







SmartWasher®

Environmentally friendly parts washer



TEMPERATURE DATA LOGGERS



CRC 60L PARTS WASHER, 180KG MAX LOAD

- Compact footprint for maximum
- versatility

 Dolly with foot step for easy
- Exra long hose with angled brush to reach hard to get at spaces
- UV Stabilised sink and body





217-2478

CRC 95L PARTS WASHER, 225KG MAX LOAD, 1080L/h FLOW RATE

- Dual flow through brushes for side by side cleaning
- · UV Stabilised sink and body
- · Larger fluid capacity for higher bioremediation capacity





217-2480

CRC PART WASHER FILTER MAT

- Reduces excess clogging during its 30 day or 1 month use
- The OzzyMat FL-4 has 4 white layers and 1 blue layer
- Recommended for normal to heavy parts cleaning

CRC 217-2477



CRC 95L PARTS WASHER, 225kg MAX LOAD, 1080L/h FLOW RATE

- · Flexible faucet
- · Flow through brush
- · UV Stabilised sink and body



CRC

217-2479

CRC 95L PARTS WASHER, 450KG MAX LOAD, 1080L/h FLOW RATE

- Dolly for easy
- UV Stabilised sink
- and body
- High capacity fluid reservoir for bioremediation on the highest cleaning throughput





217-2481

CRC 20L PART WASHER CLEANER

- · Optimised for automotive
- · Suitable for use in abattoirs with cleaning of animal fat
- · Safe for users and environment
- · Non-caustic, non-toxic and nonflammable





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BUCKETS, BRUSHES & SQUEEGEES



HAND BRUSHES FOR THE FOOD INDUSTRY

• Hand brush with soft bristles is ideal for sweeping fine particles such as flour from conveyor belts, food preparation surfaces, tables and equipment



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775-6310	YELLOW	SOFT HAND	D RDIISH

775-6315 WHITE

176-7547 HAND BRUSH LARGE, 200MM, STIFF, BLUE

HYGINE BUCKET

· Hand brush with soft bristles is ideal for sweeping fine particles such as flour from conveyor belts, food preparation surfaces, tables and equipment





8	84-	7642	GREEN	

188-9754	GREY

188-9752 LIME

884-7652 YELLOW

SQUEEGEES FOR FOOD INDUSTRY

- · Polypropylene stock, rubber
- Application: containment of liquids in cleaning



Vikan

390-4416 BLUE

390-4450 YELLOW

390-4422 RED

BOTTLE BRUSHES

- Tube Brush suitable for cleaning bottles, tubes and gaps between lines on conveyor belts
- Material: Polypropylene, Polyester, Stainless Steel
- Dimensions (Ø x L): 20 x 500 mm



'		
MEDIUM	FLOOR	BROOM

- 50 x 400mm, 56mm bristle length
- · Polyester stock and bristle

884-7563 WHITE

Application: sweeping medium sized particals/dust



390-4927 GREEN

390-4961 YELLOW

390-4933 BLUE

TABLE AND FLOOR SCRAPER

- Table and floor scraper with stainless steel blade.
- This scraper is suitable for removing stubborn food debris from floors and other surfaces.
- Can be used with any handle from the





177-4060 260MM, WHITE 260MM, YELLOW

TUBE BRUSH

- · Clean pipes, tap outlets and narrow spaces between machine parts.
- The filaments are attached to a chemical resistant and strong.



176-7660	10MM, 480MM, STIFF, YELLOW
176-7662	10MM, 480MM, STIFF, RED
176-7664	10MM, 480MM, STIFF, GREEN
176-7609	40MM, 510MM, MEDIUM, RED
176-7643	60MM, 510MM, MEDIUM, WHITE
176-7674	60MM, 510MM, MEDIUM, BLACK

ULTRA HYGIENIC PP HANDLE,1300MM

- Ultra Hygienic Handle of polypropylene
- Manufactured according to the European and American regulations for food contact materials
- Rounded grip
- Chemical resistant, withstands the most aggressive cleaning chemicals



823-4734 BLUE

823-4737 RED

823-4740 YELLOW

823-4725 GREEN

ERGONOMIC SHOVEL

- · Use this durable shovel to move large amounts of food waste or food ingredients.
- Ergonomically designed with the user's working position in mind, this product is ideal for working at floor level as well as shovelling from container to container.





188-8945 380 X 340 X 90 MM, 1310 MM HANDLE





SCOTT® Solutions for high traffic facilities where efficiency is a must

Make smart simple with SCOTT®, Think smart, Think SCOTT®

Maximise productivity:

- ► SCOTT® toilet tissue dispenses over 1km of toilet tissue
- SCOTT® Hard Roll towel dispenses 2X more hand dries when compared to SCOTT® Optimum Towel³

Efficient Washroom Solutions



SCOTT® Hard Roll Towel System

Nearly 600 hand dries per



SCOTT® Luxury Foam with Moisturisers



Outrun runouts with SCOTT® Toilet Tissue Compact Jumbo roll

So simple you can load over 1km of tissue



SCOTT® Hand Towels

Use fewer towels and create less waste with SCOTT® Brand paper towels

- Compared to SCOTT* toilet tissue 4760 and 3 roll dispenser 4975
 I roll of SCOTT* hard roll towel dispensers 1197 sheets. Based on average usage of 2 towels per hand dry.
 Based on average usage of 2 towels per hand dry. SCOTT* Optimum Towel dispenses 276 hand dries vs SCOTT* 1005 dispenses 598 hand dries

WYPALL® REACH™ CENTREFEED SYSTEM



Helping drive hygiene standards throughout your workplace environment



WypAII® Reach™ Centrefeed System

- Fully enclosed system designed to help prevent transmission of foodborne bacteria caused by handling of exposed blue rolls
- · Always at hand convenient and portable
- Ideal for wiping up spills and drying hands
- Good for space restricted environments with a convenient wall mounted bracket for storage
- Reduces paper consumption by 18%¹
- Cuts paper waste by 18%¹

Product	Colour/Code	Name	Sheet size (L x W)	Sheets per roll	Roll diameter (cm)	Case Contents	Plies	Certifications/ Features	Dispenser
	<u> </u>	Food & Hygiene Centrefeed – for Reach™ Dispenser <i>L10</i>	38 cm x 18.3 cm	430	15	6 Rolls x 163 m	1	FSC FSC	6221
	6220	Service & Retail Centrefeed – for Reach™ Dispenser <i>L10</i>	38 cm x 18.3 cm	280	15	6 Rolls x 106 m	1		6221



6221

WypAll® Reach™

1 dispenser (L25.4 x W18 x D22.4cm)



Black nozzle use with 6220



Bracket included for wall mounting





Ensures wood products are sourced from responsible.



Made with AIRFLEX® Technology.



HACCP certified "fit for purpose" in food handling or processing applications

1 Sapio Wiper Preference Research Aug 2018

WYPALL® Wipers-The right tool for every task

FACILITIES CLEANING & MAINTENANCE



SILICONE GREASE

- Silicone grease is a water repellent, nonmelting silicone grease lubricant;
- Commonly used to lubricate plastic and polythene water pipes, rubber washers and other fluid pipework during assembly;
- Working temperature range is between -50°C to 200°C;
- · This item is non-toxic;
- Acting as waterproof or air tight seal



COTTON BUDS

- 150mm long great for cleaning hard to reach areas
- Tightly wrapped cotton wool head

 absorbs and lifts detritus with
 minimal lint separation
- Rigid wooden stick provides control and precision
- Can be used wet or dry solvent can be applied to tip for more effective cleaning





494-124

100G TUBE

FIBRE OPTIC CLEANING PRODUCTS

 Optronics 1.25mm Microfibre Clean Stick





121-4194 100 PCS

AIR DUSTER

- Inert, pure compressed gas for dust removal
- Ideal for removing particulates from inaccessible areas on delicate equipment





168-1644 400ML

168-1642 300ML

ISO-PROPYL ALCOHOL (IPA)

- An alternative to CFC-based solvents which are said to destroy the earth's ozone layer
- Leaves no residue meaning you are left with a smooth surface
- Non-aggressive so does not destroy your parts
- Removes flux residues from PCBs
- Safe on most plastics





227-4427 1L BOTTLE

50 LITRE PLASTIC FLIP TOP BIN

- Durable plastic design that's easy to clean and maintain
- Flip lid for easy access
- Lightweight and portable
- Can be used for a range of waste needs
- Waterproof



PRO

178-7702 YELLOW

178-7699 RED



558-802 SINGLE ENDED, 200/BOX

PLATEN CLEANER

- Dissolves toughest ink marks, as well as oil or grease
- Restores grip after cleaning and leaves no residue
- Does not damage rubber extends the lifetime of rubber rollers therefore preventing costly replacement
- Easy to apply
- Supplied in a 100ml pump spray





217-3891 100ML PUMP SPRAY

350CC BRUSH OILER

- Nylon Pump System
- 135 mm Spout
- 120 g in weight
- 140 mm high





801-0746 300CC BRUSH OILER









UNIDIRECTIONAL **GOOSENECK MICROPHONE**

- · Unidirectional:
- Frequency: 10 Hz to 16,000 Hz;
- · Lightweight and flexible;
- · 3-pin XLR connector;
- · All metal case with non-glare black finish





699-7304 500OHM

WRITE-ON SELF-ADHESIVE

- · Self-adhesive vinyl cloth labels.
- · Pre-printed labels come with a space to write your own text on using a ballpoint pen or any other spirit-based ink.
- The labels can be used in different industries for all labelling requirements such as organising and performing quality control



450-6164 LABEL 'TESTED FOR ELECTRICAL SAFETY' (PACK OF 140)

METAL HORN SPEAKER

- · High-quality sound in public spaces or industrial settings such as factories or workshops.
- Made from hard-wearing, weather resistant metal and is suitable for both indoor and outdoor use.
- IP66 rating dust-tight, withstands powerful water jets



535-0316 30W **535-0300** 15W

LCD STOPWATCH 309

- · Stylish black water resistant plastic case, making it ideal for use in a range of applications
- · Clear LCD screen to display results with ease
- Large 12mm and 10mm digit heights
- Normal time, calendar, alarm and lap facility
- Accuracy within 2 second over 24 hours
- 5 year battery life under normal use, providing a long lasting and reliable device
- 1/100 second resolution
- Counts up to 40 minutes in 1/100 second and then to 24 hours in 1 second intervals



811-1814

DIGITAL STOPWATCH BLACK

WHITE WALL CLOCK

- · Excellent for indoor usage
- Incredibly good value for money and is suitable for commercial, health educational, industrial applications and countless public spaces
- · AA batteries are included
- 300 mm diameter x 40 mm depth, weight 740 g
- The viewing distance during a day is up to 25 metres
- Water-resistant clock, which means it suitable for damp and humid

conditions.





706-4773 WHITE, 300MM DIA

SILENT SECOND HAND WALL CLOCK

- Quartz movement and continuously moving second hand for silent operation.
- The timeless design makes it a reliable wall clock, which can be used in any commercial and non-commercial spaces.
- This plastic-cased wall clock has been architected with a shatterproof front lens to protect the Clock in case of the unexpected fallout.





440-9568 WHITE, 300MM DIA

VISIBLE AND PARTIALLY LAMINATED

- Partially laminated write on label
- Text can be written or typed on label
- Leaves checkboard pattern when removed
- High-quality printing on the labels which is ideal for conformance labelling to Safety and Quality standards





496-401

BLK WRITE-ON LABEL 'CALIBRATED', 40X15MM (PACK OF 120)

SILVER WALL CLOCK

- LCD digit heights 52 and 24 mm
- Wall Clock dimensions 220x250x23 mm
- · Digital monitor displays hours, minutes calendar and the temperature in both C/F





811-1820 RS LCD CALENDAR CLOCK



Cables & Connectors Highlights

LPC C FG STAINLESS STEEL FOOD FITTINGS

- Flexicon LPC (C-FG) conduit fitting is Stainless Steel with an external thread suitable for LPC conduits.
 This fitting has a Polyester elastomer compression face and nut seal.
- External thread
- · High tensile strength
- Corrosion resistant
- · For use with all LPC conduits
- Temperature Range: -50°C to +135°C
- Type of Protection: IP66, IP67, IP68 (2 bar) and IP69 with Stainless Steel food grade fittings



ENERGY CHAIN® - E2

- · Chains for various applications
- Large pins for long service life;Smooth interior for long cable life
- Dirt-repellant exterior (fully enclosed tubes only)
- Tapered insertion point for easy assembly
- · Chain supplied in 1 m lengths



FLEXICEN

124-0060 16MM M16

124-0062 25MM M25

124-0061 20MM M20



720-2745 116X50MM, RAD 100MM

720-2749 91X50MM RADIUS 75MM

HIROSE U.FL SERIES ULTRA SMALL COAXIAL CABLE ASSEMBLIES

- Supports high frequencies of up to 6 GHz
- Terminated with ultra fine coaxial cable for secure and stable connection
- LED operation and function indicator
- Tactile click for mating assurance
- Range of mated heights can be achieved
- Available as single and double ended cable assemblies
- Wide range of cable lengths and plug sizes





685-1047 1.37MM DIA,300MM L,TIN

(PACK OF 5

M12 CORDSETS FOR THE FOOD INDUSTRY

- M12 Single ended sensor cordset
- Female right angle connector
- Self locking threaded joint and moulded cable
- Hexagon screw-in stainless steel, especially designed for used in food processing equipment



lumbergautomatic

508-5292 FEMALE, LED, 25M

508-5286 FEMALE, LED, 10M



Metal detectable plastic cable accessories



Undetected contamination of a production batch with a foreign object is a costly concern for any food or beverage manufacturer. To help control the risk from stray bits of plastic around the processing of foodstuffs, HellermannTyton manufactures cable accessories from special high-grade metal detectable plastic resin.

Magnetic plastic?

Plastic resin with metal content can be detected by the metal detection and x-ray equipment commonly installed in hazard control points. The even dispersion of metal particles throughout these plastic products means that even tiny fragments of cable ties, fixing mounts, ID tags or cable covers, which might be cut or dropped during maintenance, can be reliably detected.



The metal particles are embedded in the special high grade plastic resin. Consequently, there is no surface corrosion in humid production environments. The blue colour added to the compound also makes this plastic visually distinctive when compared with the majority of foodstuffs and liquids. Alternative colours are available on request.

In response to scenarios frequently encountered by production plant engineers, HellermannTyton's cable management accessories include two types of cable ties, one of which is releasable and reusable and two types of screwable cable tie mounts in various sizes. Printable TipTag markers and two types of spiral wrap cable covers in different dimensions complete this portfolio of detectable plastic products.

Better safe than sorry

The special materials HellermannTyton uses to manufacture its products for food and beverage processing are of the highest quality. HellermannTyton's detectable plastic products with metal content are free of Bis(2-ethylhexyl) phthalate (DEHP), considered to be dangerous to health.

MCTPP SERIES METAL DETECTABLE CABLE TIES

- Magnetic and X-Ray detectable
- Will float to the surface of most liquids, allowing them to be easily removed $% \left(1\right) =\left(1\right) \left(1\right) \left$
- · High chemical resistance
- Remain flexible and elastic in high temperatures
- Metallic compound dispersed throughout the entire body of the ties.
- Coloured to assist in detection
- Used as part of HACCP process
- Self-extinguishing (UL94 HB rating)



891-9523 200MM X 4.6 MM, MCT SERIES (PACK OF 100)

891-9536 387MM X 7.6 MM, MCT SERIES (PACK OF 100)

891-9511 100MM X 2.5 MM, MCT SERIES (PACK OF 100)

891-9527 390MM X 4.6 MM, MCT SERIES (PACK OF 100)





M8/M12 CONNECTORS

TE's M8/M12 connectors continues to fill the ongoing needs for sensor connection in Industrial Machinery and Factory Automation. A connection standard for many years, these products also find applications outside of their traditional industries where a compact reliable connection system with environmental protection is required. TE's M8/M12 connector portfolio includes A, B, D, S, T, and X-coded (up to 10 Gb/s) versions to serve various customer needs.

The connectors are also available in shielded and unshielded versions, to support Gigabit Ethernet applications.

M8/M12 - THE CODINGS

A-coding: Actuator-sensor plug

connections for DeviceNet,

IO link and Profibus

· · · ·

B-coding: Fieldbus connections for

Profibus and Interbus



D-coding: Industrial Ethernet, Profinet,

Fthernet/IP and FtherCat



S-coding: Motor Frequency-convertors

motor operated switches,

PSUs for Power, 620 V, 12 A



T-coding: Fieldbus comp, passive

distribution boxes, motors, PSUs for Power, 63 V, 12 A



X-coding: Cat6A, high-speed 10Gbit

rugged industrial Ethernet applications IEC 6107<u>6-2-109</u>



Ambient temperature for M8:

-40°C to 85°C

Ambient temperature for M12:

-40 °C to 85 °C

Current rating:

4 and 5 pins: 4 A per pin 8 and 12 pins: 2 A per pin IP rating: IP67/IP68

As specifications vary for different parts, please refer to your TE contact for detailed

information.

Application Specifications for M8 M12 Connectors and Cable Assemblies:

114-32127, 114-137008, 114-137144

Product Specifications:

Connectors: 108-3641, 108-

19483,

108-106140 X-coded: 108-137008



Pins	Rated	Maximum Current per pin	Polution grade
3	60 V	4 A	3
4	30 V	4 A	3
3	250 V	4 A	3
4	250 V	4 A	3
5	125 V	4 A	3
8	60 V	2 A	3
12	30 V	2 A	3
	3 4 3 4 5	3 60 V 4 30 V 3 250 V 4 250 V 5 125 V 8 60 V	Pins Rated per pin 3 60 V 4 A 4 30 V 4 A 3 250 V 4 A 4 250 V 4 A 5 125 V 4 A 8 60 V 2 A

WIRES, CONNECTORS & ACCESSORIES



HE CABLE HOODS

- · Hoods are made from aluminium alloy casting and available in top, angled or side entry. Hoods provide IP65 sealing when fitted.,PG variants are supplied complete with cable sealing glands.
- Available in 6, 10, 16, 24, 40 and 64 way.,
- Rated to 380V a.c. or 450V d.c. and suitable for Group C applications.





300-3800 16WAY SIDE ENTRY,PG21 SIZE6

300-3787 10WAY SIDE ENTRY,PG16 SIZE4

HE/HD SURFACE MOUNT HOUSINGS

- of case aluminium alloy
- PG variants are supplied complete with cable gland.
- Available in 6, 10, 16, 24, 40 and 64 way.,
- Rated to 380V a.c. or 450V d.c. and suitable for $Group\ C\ applications.$





300-4005 6 WAY BASE,PG16 SIZE 3

300-4033 16 WAY BASE,PG21 SIZE 6

UNIVERSAL CRIMP TOOL FOR DEUTSCH CONNECTORS

- · Adjusting screw includes jam nut
- Compatible with a wide range of Deutsch connector crimps
- · Lightweight and comfortable to use



425-973

HE INSERTS

- · Male and female inserts will fit either cable hood housings or base housings.
- The insrts is supplied without contacts.
- Each insert has a separate earth contact.,If 32 way connectors are required both the 1-16 pole (16 way) and 17-32 pole inserts should be purchased.
- These inserts will fit alongside each other in size 10 HE housing.

HE THROUGH PANEL **HOUSINGS**

- Bases made from aluminium alloy casting and in top entry only.,
- Supplied with panel sealing gaskets.





300-3715 16 WAY SCREW TERMINAL FEMALE

300-3709 10 WAY SCREW TERMINAL FEMALE

300-3658 10 WAY SCREW TERMINAL MALE





300-3967 10 WAY THROUGH PANEL BASE, SIZE 4

FLEXLITE HIGH TEMPERATURE UL WIRE

- UL Style 3557, UL recognised component
- Operating temperature range of -55°C to +200°C
- 600 V rating
- Meets requirements of VW-1 flammability
- · Flexible and tough
- · Thin wall insulation
- Lightweight and small easy to handle



STRAIGHT M12 TO

- and data transmission
- · Protection against over heating
- Will automatically switch off in the event of a metal foreign object between transmitter and receiver
- Interchangeable Dynamic Pairing between ARISO couplers
- M30 x 80mm sized receiver
- IP67 Ingress protection





906-0925 12 CORE 3M CABLE, PLUG 906-0929 10 CORE 3M CABLE, PLUG

253-2098 1.00SQ.MM

SOLDER SLEEVES AND KIT

- · Solder Sleeves provide insulated. environmentally sealed; strainrelieved soldered connections
- Temperature range -55°C to +125°C
- · Terminate bare or tin plated conductors • Supplied in a storage case with locking lid
- · Refills available see Solder Sleeves as well as other High-Spec Solder Sleeves and Wire to wire Splices.





542-5583 SOLDERSLEEVE KIT





CGAT ADHESIVE LINED HEATSHRINK TUBING 3:1

- · High strength bonding
- · Flame retardant jacket
- Polyolefin material commonly used insulating material, flexible and durable
- Standard black in colour
- Operating temperature range of -30 to +80 °C
- Minimum shrink temperature: +80 °C
- Supplied in lengths of 1.2m





ADTHORIZED DISTRIBU	"	
157-3818	12MM	
157-3824	18MM	
157-3903	24MM	
157-3789	ЗММ	
157-3830	40MM	
157-3795	6ММ	
157-3802	9MM	

SRFR HEATSHRINK TUBING (SHRINK RATIO 1.7:1)

- A highly flexible, flame retarded, grey silicone rubber tubing with an excellent balance of physical and electrical properties
- Displays outstanding physical resists extreme heat shocks and exhibits good thermal insulation
- Temperature rating -75 to +200°C"





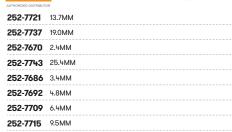


288-5112	10.0MM
288-5128	15.0MM
288-5083	2.9MM
288-5099	4.9MM
288-5106	7.8MM

FLAME RETARDANT HEATSHRINK TUBE, HEATSHRINK TUBING 2:1 (REEL)

- Heat shrink ratio of 2:1
- · Shrinks at low temperature
- Ideal for delicate or temperature sensitive equipment
- Excellent physical and electrical properties
- Free from PBBs as well as PBBOs and **PBBEs**
- Operating temperature -55°C to +135°C
- Heat Shrink temperature: 70°C"





RNF100 CLEAR HEATSHRINK TUBING 2:1 (1.2M LENGTHS)

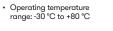
- Excellent all round performance
- Shrink ratio 2:1
- · Available in a wide range of sizes and colours
- · Flame retardant
- Flexible
- 1.2m lengths



170-6563	1.2MM BORE
170-6642	12.7MM BORE
170-6658	19MM BORE
170-6664	25.4MM BORE
170-6591	3.2MM BORE
113-2568	38MM BORE

SRFR HEATSHRINK TUBING (SHRINK RATIO 1.7:1)

- Easy to store
- · Easy to dispense
- · Well suited for repairs
- · Adhesive lined tubings
- Wide variety of sizes
- · RoHS compliant
- 3:1 shrink ration







364-1480 CGAT ADHESIVE LINED REFILL,18/6MM

CLEAR TFER HEAT SHRINK TUBING

- Semi-rigid tubing made from PTFE
- · Ideal for use in high temperatures
- Thin wall
- · Clear tubing
- · Highly flame retardant
- · Excellent resistance to chemicals and solvents
- · High mechanical strength
- · Low coefficient of friction
- Heat shrink ratio of 3.2:1 meaning when heated this tubing shrinks to just over a third of its original diameter
- Operating temperature -67°C to 250°C
- Heat shrink temperature: 330°C
- Supplied in lengths of 1.2m



170-6311	12.7MM I/D
170-6333	25.4X7.1MM
170-6282	3.2MM I/D

HT-200 HEAT-SHRINK **TUBING**

- · Tough, flexible, thin wall insulation
- · Provides excellent electrical insulation
- · 2:1 shrink ratio for all standard sizes
- High temperature performance that meets or exceeds military and industrial standards
- Resistance to most industrial solvents, fuels and chemicals
- · High flame resistance



848-9142 1/2 1M 848-9136 3/16 11 LENGTH

ATUM - MOISTURE PROOF SLEEVING 3:1 OR 4:1

- · Provides excellent environmental sealing for electrical components, wire splices, cable jackets & harness breakouts.
- · High strength bonding
- Medium walled for increased mechanical protection
- Flame retardant jacket
- Operating temperature range -55°C to +110°C





316-1580	12-4MM I/D
316-1596	19-6MM I/D
316-1568	6-2MM I/D
316-1631	8-2MM I/D

HTAT - MOISTURE PROOF SLEEVING 4:1

- Semi flexible polyolefin tubing
- Flame retardant jacket
- · Heat shrink ratio of 4:1 meaning when heated this tubing shrinks to a quarter of its original diameter, making it perfect for awkward shaped connectors
- · High shrink ratio ensures the tube will be able to fit over larger connectors and still ensure environmental sealing
- High strength bonding due to inner adhesive lining
- Operating temperature -55° +- 110°C
- Heat shrink temperature: 80
- Supplied in lengths of 1.2m²





344-0625	12-3MM I/D
344-0603	4-1MM I/D
344-0619	8-2MM I/D



316-1108

63.5MM



6000 SERIES CIRCULAR POWER CONNECTORS

- 2 22 Contacts
- Plastic or Metal Housing
- IP66, IP67, IP68 & IP69K protection
- Secure, quick mating / release cULus, UL, VDE Approvals



BUCANEER SERIES IN-LINE CONNECCTORS

- Screw termination
- · Straight body orientation
- Cable acceptance ranges between 6mm and 8mm
- Easy assembly, no special tools required
- IP68



765-9652 FLEX CONNECTOR,2 WAY PIN CONTACTS

765-9757 CHASSIS CONNECTOR, 2W, SOCKET CONTACTS

765-9775 CHASSIS CONNECTOR,16W,PIN CONTACTS

4000 SERIES CABLE CONNECTORS

- Mates with flex cable and panel mount versions
- In-Line cable connection
- · Contacts supplied separately



912-4868 3 POLE MALE

912-4950 3 POLE FEMALE

912-4931 12 POLE FEMALE

912-5072 12 POLE FEMALE, REAR

900 SERIES CIRCULAR POWER CONNECTORS

- 32A, 600V ac/dc max rating
- · 2, 3, 4, 5, 7 & 10 contacts
- · IP66, IP67, IP68 & IP69K protection
- · Single or 3 phase applications
- CCC, UL, CSA & VDE approvals



344-3999 3 WAY

841-8932 10 WAY

344-4021 5 WAY

BUCCANEER 900 SERIES FEMALE PANEL MOUNT CONNECTORS

483-966 6WAY INLINE CABLE COUPLER SOCKET,3A

- Water and dustproof
- · Leading earth pin
- Scoop proof contacts



344-4223 4 CONTACTS

344-4245 5 CONTACTS

PANEL MOUNTING SOCKET / COUPLER

- Supplied cable glands accommodate cable diameters 3.5 to 8mm
- · Shielded connectors maintain required screening
- Overall diameter 38.1mm,
- Overall length 77.5mm



468-6232 PANEL MOUNTED COUPLER

468-6226 CABLE CONNECTOR

BUCCANEER STANDARD SEALED POWER CONNECTORS

- IP68
- UL94HB Housing
- Insulation Resistance of >104 MΩ @ 500 V dc



275-5342 SCREW TERMINAL PLUG

275-5364 SCREW TERMINAL SOCKET

275-5392 INLINE COUPLER PLUG

275-5409 INLINE COUPLER SOCKET

BUCCANEER SERIES 2-POLES CIRCULAR FLEX **CABLE CONNECTORS**

- · Screw termination
- Straight body orientation
- Easy assembly, no special tools



483-893 MALE

489-532 FEMALE

The real recipe for success for Data, Signal and Power: the Han® F+B Inserts.

The Han® F+B is the first connector for the food industry that can be configured with 25 different inserts. It can be used to transfer bus systems, signals or power with contacts up to 40 A.







HARTING HAN F+B FOOD AND BEVERAGE **CONNECTOR SYSTEM**

· Consisting of housings, hoods, inserts and covers has been designed specifically for use within the demanding food as beverage industry











201-8862 INSERT MALE, 4 CONTACT, 20A 201-8864 INSERT FEMALE, 4 CONTACT, 20A

885-6097 INSERT FEMALE, 4+4 CONTACT, 16A

885-6088 INSERT MALE, 4+4 CONTACT, 16A

885-6066 BULKHEAD HOUSING

885-6075 BULKHEAD HOUSING

885-6078 PROTECTIVE COVER FOR USE WITH HOUSING BULKHEAD MOUNTING

885-6072 PROTECTIVE COVER FOR USE WITH HOOD

201-8865 CONNECTOR HOOD

HOOD CABLE PLUG + MALE INSERT

- Two-part packs that provide towards the assembly of Harting Han E® metal-bodied cable plugs, cable coupling hoods, bulkhead/panel mounting housings, and surface mounting housing sockets.,Screw terminal connection.,
- Each pack contains a hood or housing, and male or female insert.,
- All the individual components are available separately from within the relevant Ranges of inserts, hoods, and housings.,All are rated at 450 – 500V, and 16A,
- Suitable cable glands are available separately



492-5458 6 WAY, 16.0A, 500.0 V

HAN E HEAVY DUTY POWER **CONNECTOR INSERT**

- Han Thermocouple insert connectors for temperature measurement conductors, ideal for use within injection moulding machines.
- These inserts allow mixed loading of thermocouple crimp contacts and standard contacts within one insert.





842-7756 10 CONTACTS, 16A, FEMALE

512-5261 46 CONTACTS, 16A, MALE

HAN A SIZE 3 A STANDARD **METAL HOODS AND HOUSINGS**

- Slim, space saving design;
- · Robust diecast zinc construction;
- · Locking levers for a secure connection;
- Range of mounting options and cable entry angles;
- IP67 protection using seal screw







473-1714 181-0729

M20 METRIC TOP ENTRY HOOD

STRAIGHT PANEL MOUNT HOUSING

HAN A® **INSERTS**

- Slim construction
- Poles: 3-16 (screw) connection)





181-0870 3P+E SOCKET INSERT,10A 230/400V

HAN E® INSERTS

- Poles: 6-48 (screw connection wire csa 2.5mm²
- The 32 and 48 pole versions contact inserts per connector half;
- standard insert numbered '1 to 16' or '1 to 24' pole insert (m) or (f) together
- with one numbered '17 to 32' or numbered
- '25 to 48' insert (m) or (f)





114-8175

6P+E PLG INSERT,16A 400-500VAC





Tired of worrying about long term water ingress?

Put your trust in SKINTOP, tested for every possible application.

LAPP test their SKINTOP glands for many different application. IP66 for water spray, IP67/68 for immersion, and IP69K for high pressure water blasting. LAPP have you covered from basic IP rated glands, to high performance FDA & Ecolab approved glands for food and beverage areas.

- Corrosion-resistant
- Sea water-resistant
- Smooth surfaces
- Compact design
- Variable clamping ranges





ÖLFLEX® ROBUST 210

- · ECOLAB® certified harsh environment control cable.
- Outstanding UV, ozone, organic oil & chemical resistance.
- 300-500V rated with number coded cores



ÖLFLEX® CLASSIC 115 CY

- Screened PVC control cable with small outer diameter.
- EMC compliant with tinned copped braiding.
- 300-500V rated with number coded cores



- Highly flexible screened servo cable with PUR outer sheath.
- Extended line performance long travel lengths or high acceleration.
- 600-1000V rated with a temperature range from -40°C to +90°C



& LAPP

800-3271	3 CORE+EARTH 1MM
800-3287	2 CORE+EARTH 1.5MM
800-3265	6 CORE+EARTH 0.75MM
800-3303	4 CORE+EARTH 2.5MM

ETHERLINE® CAT.6A

- Industrial Ethernet cable Cat.6A for fixed installation.
- PUR halogen free outer sheath.
- For PROFINET applications with 4 pairs



444-0632	6 CORE+EARTH 1.5MM
444-0525	2 CORE+EARTH 1MM
455-0212	3 CORE+EARTH 0.75MM
444-0604	4 CORE+EARTH 1.5MM

SKINDICHT® SM-M INOX

- · Stainless steel metric counter nuts.
- · Stainless steel 303.
- · Temperature range -60°C to +200°C



& LAPP

800-3221	3C+E 1.5MM + 2X(2X0.75MM)
800-3192	3C+E 1.5MM + (2X1.5MM)
800-3195	3C+E 2.5MM + (2X1.5MM)

SKINTOP® INOX SC

- · Stainless steel version with compact design.
- · Low-resistance screen contact. optimum EMC protection.
- Wide, variable clamping ranges



& LAPP

807-9587 4 X 2 X AWG22/1

& LAPP

796-0069	WIO
796-0063	M20
796-0072	M25
796-0075	M32

& LAPP

136-8526	M16
136-8527	M20
136-8528	M25
134-8530	

EPIC® LS1 SERIES

- · Circular connectors for servo motors & power supply.
- High power at smallest installation space.
- EMC-optimised design.

EPIC® SIGNAL M23 SERIES

- · Circular connectors for servo motors & encoders.
- Robust metal connector with integrated EMC cable gland.
- Inserts included



EPIC® H-B SERIES KITS

- Flexible & robust 16A industrial connectors.
- IP65 rated.
- · Numerous additional connector kit options available online



& LAPP

727-6235	ANGLED 6 PIN					
219-138	FRONT MOUNTED 6 PIN					
727-6232	ANGLED 8 PIN					
219-059	FRONT MOUNTED 8 PIN					
219-059	FRONT MOUNTED 8 PIN					

& LAPP

218-949	D6 CONNECTOR 17 CONTACTS
219-144	F6 COUPLER 12 CONTACTS
218-983	F6 COUPLER 9 CONTACTS
219-453	D6 CONNECTOR 9 CONTACTS

& LAPP

396-1532	24 WAY
396-1475	6 WAY
396-1526	16 WAY
486-735	10 WAY





Discover the RS PRO Wiring and Connectivity Series.

An extensive selection of cables, connectors and accessories for every wiring and connectivity application and environment.





EQUIPMENT WIRE

RANGE	SHEATH	AWG	OUTER DIAMETER	VOLTAGE RATING	COLOUR	REEL LENGTH
British Standard	PVC	17 →24	1.2 → 2.65mm	300 → 1000V	Black, Blue, Brown, Green, Grey, Orange, Pink, Red, Violet, White, Yellow, Green/Yellow, Yellow/Green	100m →500m
Tinned Copper Wire	PVC	18 → 24	1.58 → 2.79mm	300 → 600V	Black, Blue, Green, Red, White	100m
DEF STAN	ETFE	12 → 24	1.15 → 2.99mm	600V	Black, White	100m
Harmonised	PVC	13 → 20	2.4 → 4.1mm	300 → 750V	Black, Blue, Brown, Grey, Red, White, Yellow, Green/Yellow	100m
UL Standard	PVC, PTFE, MPPE	12 → 28	0.9 → 4.2mm	150 → 600V	Black, Blue, Brown, Green, Grey, Orange, Purple, Red, White, Yellow	100m
Tri-Rated	PVC	4 → 22	2.6 → 10.6mm	600 → 1000V	Black, Blue, Brown, Dark Blue, Green, Green/ Yellow, Grey, Light Blue, Mid-blue, Orange, Pink, Purple, Red, White, Yellow	100m

Equiptment Wire Highlight

TRI-RATED CABLE - 4 MM2 CSA, 1 KV, 41 A

- High quality range of Tri Rated cables
 Voltage rating of 600 / 1000 V

- Class 5 flexibility
 A HR PVC (Heat Resistant PVC) insulation enabling the cable to be used in high temperature applications





811-1442	BLACK (100 METRE REEL)
906-2713	DARK BLUE (100 METRE REEL)
815-8611	PINK (100 METRE REEL)
811-1454	YELLOW (100 METRE REEL)

CONTROL CABLES

RANGE	SHEATH	NO OF CORES	AWG	OUTER DIAMETER	VOLTAGE RATING	SCREEN/SHIELD	COLOUR	REEL LENGTH
СУ	PVC	2 → 18	13 → 26	4.1 → 15.6mm	300 → 500V	Braid, Tinned Copper Braid	Grey	50 → 100m
SY	PVC	2 → 25	9 → 18	7.3 → 19.7mm	300 → 500V	Braid, Galvanised Steel	Grey	50m
уу	PVC	2 → 15	9 → 24	3.7 → 20.8mm	300 → 500V	Galvanised Steel	Grey	25 → 100m

POWER CABLES

RANGE	SHEATH	NO OF CORES	AWG	OUTER DIAMETER	VOLTAGE RATING	COLOUR	STANDARDS AVAILABLE	REEL LENGTH
Mains Power	PVC, Rubber Silicone, TPE	1 → 7	9 → 20	3.2 → 19.1mm	300 → 1000V	Black, Blue, Brown, Green/Yellow, Grey, Orange, Red, Red/ Brown, White, Yellow	EN 50525-2-11, EN 50525-2-21, H03VV-F, H03VVH2-F, H05RR-F, H05VV-F, H05Z1Z1-F, H07BN4-F, H07RN-F, H07V-K, H07ZZ-F	25 → 100m
Armoured Cables (SWA)	PVC+SWA (Steel Wire Armoured)	2 → 5	5 → 15	12.6 → 26.3mm	600 → 1000V	Black	BASEC	50m
Conduit & Trunking Cables	LSZH, PVC	1	2 → 15	2.7 → 11.3mm	450 → 750V	Black, Blue, Brown, Green/Yellow, Grey, Orange, Purple, Red, White	H07V-R, H07V-U, H07Z-R, H07V-R, H07V-U, H07Z-R	50 → 100m
Multicore Industrial Cables	PE, PVC, XLPE	2 → 36	9 → 30	2.4 → 22.8mm	250 → 1000V	Black, Green Grey White	BASEC, Defence Standard 61-12 Part 4, Defence Standard 61-12 Part 5, Euroclass Eca	25 → 500m



COMMUNICATION CABLES

RANGE	SHEATH		NO OF CORES	AWG (OUTER DIAMETER	VOLTAGE RAT	ING CO	LOUR	STANDARDS	AVAILABLE	REEL LENGTH
Twisted & Multipo Industrial Cable			1 → 19 (pairs)	18 → 24	2.4 → 11.5mm	300 → 600		, Grey, 'hite	CE, CSA Certified, EN 2714-013, EU Lov 2006/95/EC, Eurock RS 232, U	v Voltage Directive ass Eca, FAR 25-869,	50 → 500m
RANGE	SHEATH CATE	GORY	MAX B	ANDWIDTH	MAX TRASNI SPEED AT		IIELD TYPE	С	OLOUR	CONNECTOR TYPE	REEL LENGTH
LAN Cables	Catō, PVC, LSZH, PE Cató, Ca Cat7a	t6a, Cat7,	250 -	→ 2000MHz	10/100Mbps/100 1Gbps/100MH: 1Gbps/250MH: 10Gbps/500MH: 10Gbps/600M 40Gbps/2000M	z (Cat5a) Hz (Cat6) F/ Hz (Cat6a) FTF Hz (Cat7)	UTP, FTP, S/ P, U/UTP, UTP	Orange	ue, Green, Grey, a, Purple, Red, nite, Yellow	Unterminated, RJ45	1 → 500m
RANGE	CONDUCTOR TYPE	TERM	INATION	C	OAX TYPE O	JTER DIAMETER	VOLTAGE	RATING	COLOUR	IMPEDANCE	REEL LENGTH
Coaxial Cables		erminated, BNC, SMA,			í, RF, RG, RGW, rin RG, URM	1.1 → 10.8mm	170 →	1000V	Black, Brown, Green, Grey, Whit	te 50 → 93Ω	1 → 500m

Communication Cable Highlight

GREY PVC CAT5E CABLE

- Meets or exceeds all Cat5e standards
- 26 AWG with bare copper conductors
- Colour coded pairs for identification





812-4801 4 PAIR SHIELDED CATSE FTP PATCH 100M

WIRING & CONNECTIVITY CABLE ASSEMBLIES

4K - HDMI TO DVI-D **CABLE**

- · Male-to-male cable
- 19-pin HDMI connector
- Maximum resolution of 4K



182-8879 2MTR

USB 2.0 MICRO B TO USB A USB CABLE, MALE TO MALE

- Allows easy connection of a mobile device to host computer or charger
- Moulded connector

TAINLESS STEEL SADDLE CLAMP

- Strong and
- secure
 Corrosion
- resistant
- Easy to install





876-2403 1.2M, BLACK





471-1300 S/STEEL CONDUIT DISTANCE

SADDLE,20MM









AWG vs mm²

AWG NUMBER	CABLE CROSS SECTION IN MM2	OUTER DIAMETER Ø MM	CONDUCTOR RESISTANCE IN OHM/KM	MAX CURRENT AMP
1000 MCM	507	29.3	0.036	-
900	456	27.8	0.04	-
750	380	25.4	0.048	-
600	304	22.7	0.061	-
550	279	21.7	0.066	-
500	253	20.7	0.07	-
450	228	19.6	0.08	-
400	203	18.5	0.09	-
350	177	17.3	0.1	-
300	152	16	0.12	-
250	127	14.6	0.14	-
4/0	107.2	11.68	0.18	302
3/0	85	10.4	0.23	239
2/0	67.4	9.27	0.29	190
0	53.4	8.25	0.37	150
	42.4			119
1		7.35	0.47	
2	33.6	6.54	0.57	94
3	26.7	5.83	0.71	75
4	21.2	5.19	0.91	60
5	16.8	4.62	1.12	47
6	13.3	4.11	1.44	37
7	10.6	3.67	1.78	30
8	8.34	3.26	2.36	24
9	6.62	2.91	2.77	19
10	5.26	2.59	3.64	15
11	4.15	2.3	4.44	12
12	3.31	2.05	5.41	9.3
13	2.63	1.83	7.02	7.4
14	2.08	1.63	8.79	5.9
15	1.65	1.45	11.2	4.7
16	1.31	1.29	14.7	3.7
17	1.04	1.15	17.8	2.9
18	0.823	1.024	23	2.3
19	0.653	0.912	28.3	1.8
20	0.519	0.812	34.5	1.5
21	0.412	0.723	44	1.2
22	0.324	0.644	54.8	0.92
23	0.259	0.573	70.1	0.73
24	0.205	0.511	89.2	0.58
25	0.163	0.455	111	0.46
26	0.128	0.405	146	0.36
	0.102	0.361		0.29
27			176	
28	0.0804	0.321	232	0.23
29	0.0646	0.286	282	0.18
30	0.0503	0.255	350	0.14
31	0.04	0.227	446	0.11
32	0.032	0.202	578	0.09
33	0.0252	0.18	710	0.07
34	0.02	0.16	899	0.06
35	0.0161	0.143	1125	0.04
36	0.0123	0.127	1426	0.04
37	0.01	0.113	1800	0.03
38	0.00795	0.101	2255	0.02
39	0.00632	0.0897	2860	0.02
40	-	-	-	0.01



RS PRO is continually expanding the range to meet your every need, making this choice the simplest and most cost effective of all.

Browse the complete RS PRO range of Wiring & Connectivity related products available online.



























BLUE METAL-DETECTABLE NYLON 66 CABLE TIES

- Industry-standard blue colour for easy visual identification
- Metal powder particles offer full magnetic and x-ray detection, even if parts have been trimmed to fit



172-1766	150X3.6MM BLUE
172-1769	RELEASE 250X4.5MM BLUE
172-1767	400X4.6MM BLUE
172-1765	200X4.6MM BLUE
172-1768	380X7.6MM BLUE

ZERO HALOGEN HEATSHRINK TUBING KIT

- Highly flame retardant with a flame temperature index of over 350°C
- · Totally halogen free
- Very low smoke, meets LUL requirements



397-4263 2:1 SHRINK RATIO

NYLON NON-RELEASABLE CABLE TIES

- High quality
- Suitable for a multitude of uses
- Easy to thread



R5	
PRO	١

233-499	100 X 2.5, PACK 1000
233-493	380X7.6MM, PACK 100
233-487	300X4.8MM, PACK 100
233-471	203X4.6MM, PACK 100

PORTABLE HEAT SHRINK KIT

- Portable heat shrink kit consisting of a range of high-quality heat shrink tubing
- Includes range of colours, (including harmonised colours) and diameters to suit a range of different applications





487-3852 2:1, 3:1 SHRINK RATIO

CABLE TIE MOUNT NYLON 66

- Fast installation
- · Strong adhesive base
- Simple cable mounting provides secure fastening
- Available in black and natural and comes in a range of sizes
- Self-extinguis



PRO

811-1726 CABLE TIE MOUNT 19.5X19.5 BLACK NYLON 66

HEAVY DUTY CABLE PROTECTORS

- Weather and skid proof
- Black base and yellow cover provide good visibility
- High-strength cable groves, can withstand up to 20 tons per axle



136-5423 H/D CABLE PROTECTOR
DUAL 2 CHNL 32/38MM

EMPTY CABLE REEL

- Features a removable side flange that you can cut to accept panel-mount connectors
- Mounted on a rugged tubular steel frame that has a friction brake with an integral winding handle







OPEN SLOT PVC

- · Cable protection
- · Slotted construction
- Significantly lower fire risk, due to self-extinguishing nature $% \left(1\right) =\left(1\right) \left(1\right) \left$













METAL BACKSHELL PANEL MOUNT CONNECTORS

- Multipole audio/video connectors manufactured for professional use.
- The 'AXR'/'XLR' compatible connectors are precision made with zinc diecast bodies and silver-plated, solid brass turned contacts
- A benefit of these connectors is the 'squeeze' release clip, which enables plugs and sockets to be unplugged quickly by means of a simple push-down device.



548-9105 3 WAY

BRASS CABLE GLAND WITH LOCKNUT

- Completely sealed against dust
- · Excellent water resistance
- · Locknut and seal supplied



PRO

831-9062 PG36, IP68, 22-32MM

COUPLER CABLE CONDUIT FITTINGS

- Coupler cable conduit fitting
- Nominal conduit diameter of 25 mm
- Corrosion-resistant 316 stainless steel material
- Satin finish
- IP67 rating for protection in 1 m of water for up to 30 minutes



471-1350 25MM

471-1344 20MM

MALE FIELD RJ45 CONNECTOR

- Shielded male RJ45 connector
- IP68 waterproof rating
- Suitable for a temperature range of -40°C to +80°C





111-6743 RJ45 FULL METAL C3 FIELD INSTALLABLE

IP68 METRIC DOME TOP GLAND

- · Metric threaded
- Completely sealed against dust
- · Excellent water resistance
- · Black and white versions available
- Made with high quality Nylon 66"





669-4670	M32
669-4689	M40
669-4676	M25
669-4667	M16

CAT.5E INLINE COUPLERS RJ45 ADAPTORS

- Cat5e RJ45 coupler
- 8P8C socket to 8P8C socket
- 50µ gold plated contacts
- Wired straight contact 1 to contact 1, etc.
- For shielded twisted pair (STP) cables and patch leads
- Meets C5e EIA/TIA
 568B Standard
- Dimensions: 25 x 25 x 45 mm





340-9630 CAT.5E RJ45 STP SOCKET-SOCKET

INSULATED FRENCH COLOUR CODED BOOTLACE FERRULES

- Nylon insulated collar for reduced leakage, creepage and gas intrusion
- Tin plated copper tube for excellent conductivity
- Crimped terminal can be repeatedly inserted and removed without degrading end of the wire



458-724	GREY,8MM PIN
458-695	BLUE,8MM PIN
458-702	RED,8MMPIN 1MMSQ.
458-718	BLK,1.5MMSQ. WIRE

IP68 METRIC DOME TOP GLANDS

- · Metric threaded
- Completely sealed against dust
- · Excellent water resistance



PRO

669-4654	M12, 3-6.5MM
669-4660	M20, 4-9MM
669-4664	M20, 6-12MM
669-4673	M20, 10-14MM
669-4686	M63, 34-44MM

THROUGH HOLE JACK SOCKET

- Stereo jack socket
- Robust nylon body
- Switched contacts





449-348 3 WAY STEREO PCB MOUNT JACK SOCKET,1/4IN



Wide selection of sensors from general purpose RFID to IO-Link models.

Sensor Highlights

W2S-2 SERIES PHOTOELECTRIC SENSORS

- WTB2S-2 miniature photoelectric with PinPoint LED for rugged and reliable detection of all object types
- Choice of diffused background suppression, retro-reflective or through-beam - with sensing ranges up to 2m
- All sensors have PNP output and 10-30Vdc supply, retroreflective sensors can use a range of reflectors -



SICK

842-8572

842-8560

842-8585 842-8579

REFLECTORS FOR RETROREFLECTIVE **PHOTOELECTRIC SENSORS**

- A range of relectors from Turck Banner suitable for use with retroreflective photoelectric sensors.
- Various shapes and size available.





764-3878 FOR USE WITH Q45BB6LL SERIES, 51 X 51 MM SQUARE

THREADED BARREL **BLOCK BODY SENSOR**

- Extended sensing ranges
- · Sense all metals at the same distance - with no reduction factor
- IP67 rating (Barrel is IP68)
- High switching frequency
- No load current 15mA max.
- Operating Temperature Range -25 \rightarrow +85°C
- Short circuit protection Overload protection
- Reverse polarity protection
- Inherent weld field immunity





M18 X 1 INDUCTIVE SENSOR, 12 MM DETECTION, IP68, PG9 GLAND TERMINAL

GUIDED RADAR LEVEL PROBES

- Guided radar level probes using TDR radar technology and a cuttable level probe to achieve precise level detection
- which is immune to deposit formation
- Analog outputs include 4 mA-20 mA / 0-10V, & more, plus digital outputs
- Suitable for process temperatures up to 100°C with IP67 / IP69K protection



SICK

794-3389 500MM PROBE

794-3383 1000MM PROBE

IP69K OSISENSE XUK PHOTO-ELECTRIC **SENSORS**

- OsiSense XU offers a full range of diffuse, Background Suppression (BGS), polarized reflex, laser reflex & thru-beam in the 4 most popular form-factors worldwide
- Applicative sensors for material handling, packaging, labeling (fork sensors technology) , assembly, food & beverage
- Compact 50x50mm





179-9952 DIFFUSE





BARREL INDUCTIVE PROXIMITY SENSOR

- Twice nominal sensing distance
- · Flush mount
- Fast switching frequency





444-3271 M12, SR 4MM, PNP, IP69K

444-3293 M18, SR 8MM, PNP, IP69K

444-3287 M18, SR 8MM, PNP, 2M

444-3366 M30, SR 15MM, IP69K

INDUCTIVE PROXIMITY SENSORS OSISENSE XS SERIES CABLE TERMINAL

- · Forms part of the OsiSense XS range of products
- Cylindrical M18 sensor design
- 62mm size
- 8mm nominal sensing distance
- Frontal detection face
- Sensor type inductive proximity sensor



444-3344 AC/DC SENSOR,M18

CYLINDRICAL

- · M18 cylindrical body
- · PNP switched output
- · Precise object detection of any



612-2229 M18 PNP NO, 0.5M

612-2128 M30 PNP NO 8M

TELEMECANIQUE SENSORS REFLECTOR

· A range of square reflectors for use with the OsiSense XU series of Photoelectric sensors



(8)	Telemecanique
	Sensors

281-1739	DIM: 24 X 21MM
281-1751	DIM: 50 X 50MM
324-1585	DIM: 100 X 100MM

INDUCTIVE PROXIMITY **SENSORS OSISENSE XS SERIES GLAND TERMINAL**

- Flat form (block) 40 x 40 x 117.
- · Best in class quality and immunity
- IP65, IP67, IP69K to harsh industrial environments.



aensors	
79-9936	15MM DETECTION 24 240V
79-9939	20MM DETECTION 24 240V
70 001-0	20 MM DETECTION 12 I/OV D

M8, M12 AND M18 INDUCTIVE SENSORS

- · LED status display
- Plastic body
- Operating temperature range -25° → +70°C
- Reverse polarity and short circuit protection (dc types only)
- Flush or non flush mount versions



324-1226	M8, SR 2.5MM, PNP, 2M
324-1248	M12, SR 4MMM, PNP, 2M
324-1254	M12, SR 4MM, PNP, M12
324-1311	M18, SR 8MM, PNP, 2M
609-7331	M18, SR 15MM, PNP, 2M
609-7230	M18, SR 5MM, PNP, M12
609-7280	M18, SR 8MM, PNP, 2M
772-9874	M18, SR 20MM, M12, SS

MULTIMODE ULTRASONIC SENSOR PHOTOELECTRIC SENSOR WITH • IP67 rated **COMPACT SENSOR**

- Four modes of detection in one unit • Easy set-up at the touch of a button
- Self teach precise set-up 'multi-mode detection'
- Sensing distance dependent on mode of operation
- Through Beam Functionality using additional light source (thru-beam accessory) Programmable NO/NC switching
- Connection: pre-cabled or plug-in connector (M12 4 pin male)
- IP67 Protection rating
- Operating temperature range -15 → +55 °C





455-4983 COMPACT 50 X 50 PLASTIC BODY

XS INDUCTIVE PROXIMITY SENSORS -NICKEL PLATED BRASS

- · General purpose.
- · Cylindrical (barrel) M18.
- Size 51 mm.
- · Fixed body, Flush mountable.
- Nickel plated brass, PPS Front.
- · Discrete signal, 4-wire.
- Output 1 NO + 1 NC, DC circuit, PNP.
- Male connector M12, 4 pins.



133-6320 M18 SR 5MM 144-9711 M30 SR 30MM



Choosing the right detection components can improve machine availability and reduce the risk of contamination

OMRON

With the day to day pressures to remain competitive and keep your production process running, sometimes the simple things can be forgotten. Taking steps to avoid potential process contamination can help to drastically reduce the risk of lost production, substandard product reaching your end customer and the possible negative impact to your business reputation.

Dan Rossek, Regional Marketing Manager
- Omron Electronics, offers his opinion on
selecting fit for purpose detection components,
taking into consideration the requirements
of the environment and the application
needs. All of which can often be overlooked
leading to undesirable consequences.

Fit for purpose sensors is the smart choice.

Often detection components are located at the front end of the manufacturing process, close to the raw product and it is in these situations that selecting a fit for purpose detection component is most critical. Often, due to hygiene requirements, these areas will be subjected to regular cleaning processes, involving high pressure / temperature wash down and often involving aggressive chemical agents.

Detection components which are not designed to operate under these tough environmental conditions will often fail prematurely, which in turn will result in machine down time to rectify the problem. A single instance of machine unavailability is costly and will have an adverse effect on manufacturing efficiency, but far too often this issue is repetitive as the product selection is not changed, resulting in reoccurring issues, further costs and increasing inefficiencies.

A more pertinent issue, especially in applications around primary food processing, where maintaining hygiene and eliminating contamination is a priority.

The cleaning process can lead to many challenges for detection components, as the aggressive chemicals used to maintain hygiene, will easily corrode common materials used in standard detection devices.

This situation can lead to contamination of the product, through the transfer of the corroded material on to the raw food product. The result of this can be considerable financial costs to manufacturers through product recalls and potential loss of brand reputation.

Omron recognise the need to develop products which are fit for purpose for applications in processing industries and offer a wide range of solutions which have been designed to work in these tough environments. Components manufactured in food grade stainless steel (SUS316L) and other materials which are inert to the effects of cleaning agents, has been a priority for several years.



As well as chemical resistance, Omron offer products tested to the highest water ingress protection of IP69k, to ensure operational longevity, even under high pressure and temperature cleaning regimes. A wide range of Omron products are also tested and certified for chemical resistance by independent agencies and manufacturers, including Ecolab and Diversey to ensure suitability and offer piece of mind to manufacturers.



E3S-DB TRANSPARENT OBJECT SENSOR

- E3S-DB sensor provides most reliable detection of all kinds of transparent objects such as PET bottles, glass bottles or transparent trays
- Choice of Smart Teach enablin up or trimmer sensitivity adjust
- Narrow beam types detecting smallest gaps
- Proven for environments in the Food & Beverage industry



E2FM STAINLESS STEEL INDUCTIVE SENSORS

- One-piece 303 stainless steel body resists damage caused by impact or harsh chemicals
- · Thicker sensing face for superior mechanical durability, wear resistance
- 20% greater sensing range (10mm) on M30 versus the CENELEC standard 8mm
- Surge suppressor, load short-circuit protection, choice of connection format



OMRON

831-5971	0.7M, PNP, M12, SMART TEACH
831-5969	4.5M, PNP, M12, SMART TEACH
831-5975	0.7M, PNP, M12, TRIMMER ADJ.
831-5978	4.5M, PNP, M12, TRIMMER ADJ.

OMRON

615-8290	и8, SR 1.5MM, PNP M12	
617-0587	/12, SR 2MM, PNP M12	
617-0593	⁄118, SR 5MM, PNP M12	
617-0616	//30, SR 10MM, PNP M12	

ER SERIES STAINLESS STEEL ROPE PULL

- The ER series stainless steel bodied safety rope pull is designed to be tough and durable for even the most demanding applications
- · Rope pull switches eliminate the need for numerous E-stop buttons reducing installation time and costs
- Supports spans up to 80m and integral tension indicator makes system setup & maintenance easy
- IP67 (NEMA 6) enclosure enables the switch to withstand water wash down cleaning



E3ZM-V COLOUR MARK SENSOR -STAINLESS STEEL

- A detergent & corrssion resistant colour mark sensor in a robust stainless steel 316L housing
- Designed to provide reliable detection of all common print marks in packaging applications
- White LED for stable detection of differently colored print marks
- Easy-to-use teach-in button or remote dynamic teach
- Fast response time of 50µs



OMRON

757-9121 STAINLESS STEEL ROPE PULL + RESET & E-STOP

OMRON

458-222 PNP 2M CABLE

F3S-TGR HYGIENIC DOOR SAFETY SWITCHES

- Non-contact switches for interlock hinge, sliding or removable guard doors
- IP67 Stainless steel construction ideally suited to high hygiene demands in the food industry
- Long sensing range to avoid false signals due to mis-aligned door
- Hall effect coded switch have LED indication, electronic output and up to 3 can be connected in series
- Reed switches can switch 1mA, 10 VDC and up to 6 can be connected in series



OMPOR



Discover the RS PRO Sensors series.

A wide range of sensing technologies, from inductive, to capacitive, from rotary encoders to load cells. For any application and with RS PRO-grade reliability.





Photoelectric sensors detect and measure physical objects or quantities by emitting a field or beam of electromagnetic radiation. An object is detected by measuring alterations in the return signal.

Through-beam sensors rely on two separate housings, one for the transmitter and one for the receiver. Retroreflective photoelectric sensors have both the transmitter and receiver contained within the same housing but require a reflector opposite to the sensor. Diffuse sensors are easier to install as only one device has to be mounted. This is because the transmitter and receiver are contained within one housing.

Background Suppression



DETECTION TYPE	DETECTION RANGE (MM)	OUTPUT TYPE	TERMINAL TYPE	STOCK NO
Background Suppression	100	NPN NO/NC	2m Cable	202-4467
Background Suppression	100	NPN NO/NC	NPN NO/NC M12	
Background Suppression	100	PNP NO/NC	2m Cable	202-4470
Background Suppression	100	PNP NO/NC	M12	202-4471
Background Suppression	350	NPN NO/NC	2m Cable	202-4448
Background Suppression	350	NPN NO/NC	M8	202-4449
Background Suppression	350	PNP NO/NC	2m Cable	202-4450
Background Suppression	350	PNP NO/NC	M8	202-4451
Background Suppression	2000	PNP+NPN	2m Cable	202-5446
Background Suppression	2000	PNP+NPN	M12	202-5447

Diffuse



DETECTION TYPE	DETECTION RANGE (MM)	OUTPUT TYPE	STOCK NO
Diffuse	800	Relay	202-5452
Diffuse	2000	NO+NC, NPN	202-5448
Diffuse	2000	NO+NC, PNP	202-5450
Diffuse	2000	Relay	202-5451
Diffuse	2000	кегау	202-5451

Image for illustrative purposes only

Through Beam Emitter / Reciever



DETECTION TYPE	HOUSING MATERIAL	DETECTION RANGE (MM)	OUTPUT TYPE	TERMINAL TYPE	THREAD SIZE	STOCK NO
Through Beam (Emitter)	Brass Nickel Plated	5000	-	2m Cable	M12×1	204-3990
Through Beam (Receiver)	Brass Nickel Plated	5000	NPN NO	2m Cable	M12×1	204-3991
Through Beam (Receiver)	Brass Nickel Plated	5000	PNP NO	2m Cable	M12×1	204-3993
Through Beam (Emitter)	Brass Nickel Plated	10000	-	2m Cable	M18×1	204-3994
Through Beam (Receiver)	Brass Nickel Plated	10000	NPN NO/NC	2m Cable	M18×1	204-3995
Through Beam (Emitter)	PBT	10000	-	2m Cable	M18×1	204-4000
Through Beam (Receiver)	PBT	10000	NPN NO/NC	2m Cable	M18×1	204-4001

Through Beam Emitter / Receiver



DETECTION TYPE	DETECTION RANGE (MM)	OUTPUT TYPE	STOCK NO
Through Beam (Emitter)	30000	Relay	202-5460
Through Beam (Receiver)	30000	Relay	202-5462

Image for illustrative purposes only



An inductive sensor provides non-contact detection of metallic objects, with some sensors being able to target both ferrous and non-ferrous metals, while others specialise in sensing only one type. Inductive proximity sensors are suitable for use in virtually any industry with some types also able to be used in hazardous environments.

Inductive sensors can also be affected by interaction with other sensors and ambient environmental influences. Careful installation will be required to ensure the sensor is effective and is not adversely affected by any surrounding sensors or metallic objects.

Inductive Sensor



DETECTION RANGE (MM)	OUTPUT TYPE	HOUSING MATERIAL	TERMINAL TYPE	THREAD SIZE	IO LINK	STOCK NO
0.6	PNP NO	Stainless Steel	2m Cable	M4×0.5	N	206-6124
0.8	PNP NO	Stainless Steel	M8	M5×0.5	N	206-6126
0.8	PNP NO	Stainless Steel	2m Cable	M5×0.5	N	206-6127
1.5	PNP NO	Stainless Steel	M8	M5×0.5	N	206-6128
1.5	PNP NO	Stainless Steel	2m Cable	M5×0.5	N	206-6129
2	PNP NO	Stainless Steel	M12	M8×1	У	206-6130
2	PNP NO	Stainless Steel	M8	M8×1	У	206-6132
2	PNP NO	Stainless Steel	M8	M8×1	У	206-6133
2	PNP NO	Stainless Steel	2m Cable	M8×1	У	206-6134
2	PNP NO	Stainless Steel	2m Cable	M8×1	У	206-6135
4	PNP NO	Stainless Steel	2m Cable	M8×1	У	206-6136
4	PNP NO	Stainless Steel	M12	M12×1	У	206-6137
4	PNP NO	Stainless Steel	M12	M12×1	У	206-6138
4	PNP NO	Stainless Steel	2m Cable	M12×1	У	206-6139
4	PNP NO	Stainless Steel	2m Cable	M12×1	У	206-6140
8	PNP NO	Stainless Steel	M12	M18×1	У	206-6141
8	PNP NO	Stainless Steel	M12	M18×1	У	206-6142
8	PNP NO	Stainless Steel	2m Cable	M18×1	У	206-6143
8	PNP NO	Stainless Steel	2m Cable	M18×1	У	206-6144



DETECTION RANGE (MM)	OUTPUT TYPE	HOUSING MATERIAL	TERMINAL TYPE	THREAD SIZE	IO LINK	STOCK NO
38	PNP NO	Brass Nickel Plated	M12	M30×1.5	N	206-6166
38	PNP NO	Brass Nickel Plated	2m Cable	M30×1.5	N	206-6167
2	PNP NO	Plastic Vistal®	M8	-	N	206-6168
2	PNP NO	Plastic Vistal®	2m Cable	-	N	206-6170
3	PNP NO	Plastic Vistal®	M8	-	N	206-6171
3	PNP NO	Plastic Vistal®	2m Cable	-	N	206-6172
4	PNP NO	Plastic Vistal®	M8	-	N	206-6173
4	PNP NO	Plastic Vistal®	2m Cable	-	N	206-6174
20	PNP NO/NC	Plastic PA 66	M12	-	N	206-6176
20	PNP NO/NC	Plastic PA 66	Terminal	-	N	206-6177
20	PNP NO	Plastic PA 66	M12	-	N	206-6178
20	PNP NO	Plastic PA 66	Terminal	-	N	206-6179
40	PNP NO/NC	Plastic PA 66	M12	-	N	206-6180
40	PNP NO/NC	Plastic PA 66	Terminal	-	N	206-6181
40	PNP NO	Plastic PA 66	M12	-	N	206-6182
40	PNP NO	Plastic PA 66	Terminal	-	N	206-6183









Capacitive proximity sensors feature a pair of parallel plates, similar to a standard capacitor. They work when an object produces changes in capacitance, triggering the sensor. Capacitive sensors are designed for use with non-ferrous materials and are ideal for close-range applications such as level detection and monitoring.

Capacitive sensors can be affected by their environment and possible interaction with other sensors. This could include anything from the ambient temperature to other objects in the vicinity. As a result of this, precautions should be taken when installing these sensors to avoid interference from other objects or sensors.

Flush Mount



THREAD SIZE	DETECTION RANGE (MM)	TERMINAL TYPE	OUTPUT TYPE	IP RATING	STOCK NO
M12×1	2	2m Cable	NPN-NO	IP67	184-5578
M12×1	2	2m Cable NPN-NO		IP67	184-5582
M12×1	2	2m Cable	PNP-NO	IP67	184-5584
M12×1	2	M12	NPN-NO	IP67	184-5579
M12×1	2	M12	NPN-NO	IP67	184-5583
M12×1	2	M12	PNP-NO	IP67	184-5585
-	5	2m Cable	NPN-NO	IP67	184-5569
-	5	2m Cable	PNP-NO	IP67	184-5570
M18×1	5	2m Cable	NPN-NO/NC	IP67	184-5593
M18×1	5	2m Cable	NPN-NO/NC	IP67	184-5604
M18×1	5	2m Cable	PNP-NO/NC	IP67	184-5596
M18×1	5	2m Cable	PNP-NO/NC	IP67	184-5606
M18×1	5	2m Cable	NO	IP67	184-5591
M18×1	5	M12	NPN-NO/NC	IP67	184-5594
M18×1	5	M12	NPN-NO/NC	IP67	184-5605
M18×1	5	M12	PNP-NO/NC	IP67	184-5607
M18×1	5	M12	NO	IP67	184-5592
M18×1	5	M12	NO	IP67	184-5603
M30×1,5	10	2m Cable	NPN-NO/NC	IP67	184-5615

Non-flush Mount



THREAD SIZE	DETECTION RANGE (MM)	TERMINAL TYPE	ОИТРИТ ТУРЕ	IP RATING	STOCK NO
M12×1	4	2m Cable	NPN-NO	IP67	184-5580
M12×1	4	2m Cable	NPN-NO	IP67	184-5586
M12×1	4	2m Cable	PNP-NO	IP67	184-5588
M12×1	4	M12	NPN-NO	IP67	184-5581
M12×1	4	M12	NPN-NO	IP67	184-5587
M12×1	4	M12	PNP-NO	IP67	184-5590
-	8	M12	NPN-NO	IP67	184-5571
M18×1	8	2m Cable	NPN-NO/NC	IP67	184-5599
M18×1	8	2m Cable	NPN-NO/NC	IP67	184-5609
M18×1	8	2m Cable	PNP-NO/NC	IP67	184-5611
M18×1	8	2m Cable	NO	IP67	184-5597
M18×1	8	M12	NPN-NO/NC	IP67	184-5600
M18×1	8	M12	NPN-NO/NC	IP67	184-5610
M18×1	8	M12	PNP-NO/NC	IP67	184-5601
M18×1	8	M12	PNP-NO/NC	IP67	184-5612
M18×1	8	M12	NO	IP67	184-5598
M18×1	8	M12	NO	IP67	184-5608
-	10	2m Cable	NPN-NO	IP67	184-5577
M30×1,5	15	2m Cable	NPN-NO/NC	IP67	184-5622



Fibre optic sensors are a type of proximity sensor that have an optical fibre connected to a light source to allow for detection in tight spaces or where a small profile is beneficial. The optical fibre is a transparent fibre made of glass (silica) or plastic with a diameter slightly thicker than a human hair, this fibre transmits light between the two ends to produce an electrical signal.

Fibre Optic Sensors



FIBRE OPTIC TYPE	OUTPUT TYPE	SUPPLY VOLTAGE	IP RATING	POWER CONSUMPTION	DETECTION RANGE	STOCK NO
Plastic	NPN	24V DC	IP54	1.44W	with 896-7298 = 110 -290mm	204-0681
Plastic	PNP	24V DC	IP54	1.44W	with 896-7285 = 300 - 800mm	204-0682

Image for illustrative purposes only

Load cells, often called load cell transducers, are crucial components in most industrial weighing systems. They are available in many different configurations and standards, depending on the intended application and environment.

Among the various different types of load cells available, models and styles can be differentiated in two key ways:

- 1. By the specific method they use to detect weight (compression load cells, tension load cells and other measurement types).
- 2. By the type of output signal generated (hydraulic load cells, piezoelectric load cells and various other configurations).

Load Cell Sensors



Image for illustrative purposes only

FORCE MEASURED	MEASUREMENT RANGE MIN/MAX (KG)	OUTPUT TYPE	IP RATING	MAX VOLTAGE	STOCK NO
Compression	0.3 - 3	PNP	IP67	15V	204-2767
Compression	5 - 20	PNP	IP66	10V	204-2772
Compression	5 - 500	PNP	IP68	15V	204-2765
Compression	10 - 100	PNP	IP67	15V	204-2770
Compression	50 - 1000	PNP	IP66	15V	204-2768
Compression	50 - 1000	PNP	IP68	10V	204-2764
Compression	60 - 1200	PNP	IP67	15V	204-2771
Compression	500 - 3000	PNP	IP68	15V	204-2766
Compression & Tension	1 - 500	PNP	IP66	10V	204-2773









With RS PRO you have a choice of over 60,000 proven quality, great value products, including the widest single-branded offer for the food and beverage industry.



The RS PRO Seal of Approval is only awarded after a process of rigorous testing, inspection and certification to demanding international quality standards.



With thousands of RS PRO branded, quality products to choose from, choosing RS PRO is the simplest, most cost effective choice of all.



RS PRO provide customers with one brand that gives huge choice and availability, proven quality and process that can be trusted. RS PRO is the choice for great value and reliable products.



Essential components for managing your complex process, automation and electrical environments.

Electrical, Automation & Process Control Highlights

MECHANICAL COUNTER

- 5-digit, manual reset and surface mount device.
- Pivoting control lever and automatic return.
- Count mode of 1 stroke is equal to 1digit/ drive.
- Maximum speed of the shaft is 500spm.
- Reset by knurled knob and reset button at left
- Stroke angle is between 38° and 60°



Baumer

150-467 MECHANICAL COUNTER WITH LEVEL

XCS-DMC/XCS-DMP CODED MAGNETIC SWITCHES, RECTANGULAR

- Actuation on 3 sides: face to face and face to side
- 8mm tolerance to misalignment (5mm for XCS-DMC)
- LED versions have an LED in series with one N/C giving indication when guard is closed
- Coded reed technology switch cannot be totally defeated by a simple magnet
- Rectangular plastic housing
- Dimensions: compact: H51 x W16 x D7mm, standard: H88 x W25 x D13mm
- Available pre-cabled or with connector on flying lead
- IP66/67 protection in accordance with EN/IEC 60529
- ROHS compliant



Telemecanique

133-0072 2NC/1NO, 5M

DIN RAIL MOUNT - DRA1-CMX SERIES

- 10mm single channel DIN rail mount SSR assembly
- DC ratings up to 200 Vdc and 8 A
- 3-10 and 20-28Vdc control
- SPST-NO function
- Cage style screw terminals for easy connection
- Fits standard 35mm DIN rail
- Includes LED
 Status indicator



r⊃7r~r Sensata - Cyton

701-8483 6A, 100 VDC

CONNECTING CABLE

- A range of connecting cables for the SIMATIC 170 series of mobile panels supporting a Profibus or Profinet environment.
- 10M length



746-5372 FOR USE WITH 277 SERIES MOBILE PANEL

3000 SERIES -TEMPERATURE CONVERTER

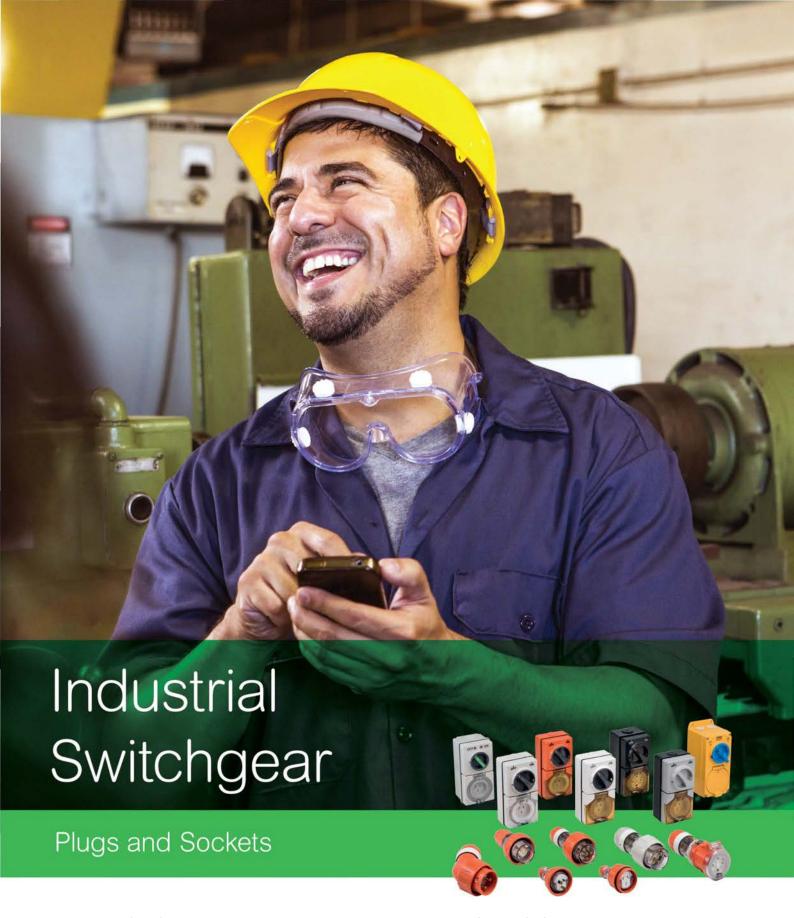
- High basic 0.05% accuracy in all available signal ranges
- All units tested to ensure 2.5 kVAC isolation and have excellent noise immunity
- Response time of < 30 ms for temperature measurements
- Low temperature coefficient better than 0.01% / °C in a wide -25 to +70°C ambient temperature range for precise measurements
- Long term accuracy better than 0.1% / 3 years with no need for re-calibration



electronics

827-5467 5.5 → 35 V DC





Providing the strength, reliability and durability demanded of today's industry

Life Is On Schneider

INDUSTRIAL PUSH BUTTONS, PILOT LIGHTS & CONTROL STATIONS



CONTACT BLOCKS

- Short-circuit protection via a 10 A cartridge fuse, providing excellent circuit protection
- · Lightweight, easy to fit and configure
- Easily removable and adjustable
- Front mounting
- Operating temperature of between -40 to 70 °C



331-0473 1NO

331-0489 1NC

HARMONY XALK CONTROL STATIONS

- Easy to use "turn to release" functionality for easy reset once activated
- Light grey RAL 7035 base enclosure, with a yellow RAL 1021 cover colour and a prominent, bold red push button for easy identification to its function
- Durable Polycarbonate material, easy to clean and maintain with added durability for extended use (mechanical durability of 300,000 cycles)



Schneider Electric

795-1295 EMERGENCY STOP STATION INC TURN RELEASE

HEADS FOR SELECTOR SWITCHES ZB4-B (2)

- Low-load electrical contact
- Screw clamp connection, pins for printed circuit
- Ingenious locking system
 Florible and rebust
- Flexible and robust
- -40°C to 70°C operating temperature



Schneider Blectric

330-9041 2 POSITION STAYPUT TWIST SELECTOR SWITCH

330-9057 3 POSITION STAYPUT TWIST SELECTOR

330-9142 2 POSITION STAYPUT TO LEFT KEY SWITCH

HARMONY EMERGENCY STOP HEAD ZB4B

- Easy mountable, using a single installer
 (Self-maintaining of the head in its cut-out)
- Clip-together component system (head, body, contact blocks)
- Chromium plated metal, durable and easy to recycle
- The switch has great resistance to electric shock, conforming to the machine safety standards of the IEC (Class 1)
- Single locking screw, making the button easy to mount, reliable and secure



Schneider **Electric**

330-9388 TWIST TO RELEASE

XAL CONTACT BLOCKS

- Slow break contact operation in conjunction with pushbuttons for quicker action (depending on the speed of the operator)
- 1,000,000 cycles of mechanical durability, robust and reliable to ensure continuous operation
- Lightweight, easy to fit and configure Easily removable and adjustable
- · Front mounting



Schneider Blectric

331-0580 CONTACT BLOCK INC SCREW TERMINAL

BODY/FIXING COLLAR ZB4-B

- The collar weighs 0.003 g
- The mounting hole size of 22 mm
- It is a green premium product
- Designed to be used with the Harmony XB4 series of push-button switches
 Comprised of a strong metal material
- Comprised of a st enabling the component to hard-wearing and long-lasting



Schneider Electric

31-0142 MOUNTING BLOCK FOR PUSHBUTTON

HARMONY XB4 EMERGENCY STOP PUSH BUTTONS

- Effortless to use "turn to release" functionality for easy reset once activated
- Chromium plated metal panel with prominent red round push button, easily alerting to the eye
- 2 NC contacts, for simple configuration
- Short-circuit protection using a 10 A cartridge fuse which conforms to EN/IEC 60947-5-1



Schneider

795-1306 40MM TURN RELEASE RED 1NC

EMERGENCY STOP HEAD - TURN TO RELEASE /KEY SWITCH

- An instantaneous disconnect of your circuit upon alarm & activation of this emergency stop control unit
- Modular system, nearly all shapes and functions are compatible with each other (if you need to switch the push buttons head you can do so without changing the other parts)
- Conformity with IEC, UL, CSA standards - giving you the reassurance of reliability and safety in your industry



Schneider Blectric

426-2808 E STOP 40MM TRIG ACTION TURN RELEASE RED

FRONT MOUNT INTEGRAL LED BODIES

- Lightweight, easy to fit and configure screw clamp terminal connectors Easily removable and adjustable
- 100,000 H service life when used at rated voltage, used within an average temperature of 25 °C
- Protected integral LED, coming in varying colours including white, red, yellow and more



Schneider Electric

610-2821 LIGHT BLOCK, GREEN, INTEGRAL LED, 24V



VARIABLE SPEED DRIVES AND CONTROLLERS

Schneider Electric

IIIUMINATED RING E-STOP CONTROL BOX 24VDC

- Ring lights up while in normal operation, and turns red when the stop is activated - 24VDC Only
- 1 NO + 1NC contacts IP66/IP67/IP69/IP69k



Schneider

195-8731

PROGRAMMABLE RECIEVER FOR WIRELESS PUSHBUTTON

- A 3 phase monitoring relay with configuration via FREE Zelio NFC Android App
- Monitors phase asymmetry, phase failure, undervoltage, overvoltage, over & under frequency
- 2 C/O outputs with adjustable on/off delay & voltages

Schneider Electric

828-3008

TeSys D GREEN CONTACTORS

- The TeSys D range now has AC/DC coils (energized with either AC or DC), lower energy usage and keeps the same dimensions are the original TeSys D range
- Low control current allows direct PLC control for contactors up to 80A
- Dual AC/DC coils reduces the amount of spares or components you need to keep in stock



Schneider Electric



WIRELESS AND BATTERY-LESS PUSHBUTTON TRANSMITTER

- Fits onto existing XB4/XB5 range of Harmony pushbutton heads
- Communicates 100m, can increase with



Schneider Electric

815-1755



3-PHASE MONITERING RELAY WITH NFC

- A 3 phase monitoring relay with configuration via FREE Zelio NFC
- Monitors phase asymmetry, phase failure, undervoltage, overvoltage over & under frequency
- 2 C/O outputs with adjustable on/off delay & voltages thresholds



Schneider Electric

179-0019 RMNF22TB30 (120-480Vac)

MULTIFUNCTION TIMER RELAY WITH NFC

- A timer relay configured via NFC (near field communication) technology available current Android smartphones
- \bullet Using the FREE Zelio NFC App the timer can be configured or adjusted precisely, without opening the panel
- Offers 28 functions, 22.5mm profile and DPDT 8A relay output



Schneider Electric

914-5070 RENF22R2MMW (24-240Vac/dc)

ALTIVAR MACHINE 320

- The Altivar Machine ATV320 variable speed drive improves machine effectiveness in a wide variety of applications
- Altivar Machine ATV320 was designed to improve the effectiveness and efficiency of machines, while optimizing design and engineering costs



Schneider Electric

125-3237	ATV320U04N4C	ATV320 0,37KW 400V 3PH COMPACT - 105 x 143 x 158
125-3241	ATV320U06N4C	ATV320 0,55KW 400V 3PH COMPACT - 105 x 143 x 158
125-3245	ATV320U07N4C	ATV320 0,75KW 400V 3PH COMPACT - 105 x 143 x 158
125-3249	ATV320U11N4C	ATV320 1,1KW 400V 3PH COMPACT - 105 x 143 x 158
125-3253	ATV320U15N4C	ATV320 1,5KW 400V 3PH COMPACT - 105 x 143 x 158
125-3257	ATV320U22N4C	ATV320 2,2KW 400V 3PH COMPACT - 140 x 184 x 158
125-3259	ATV320U30N4C	ATV320 3KW 400V 3PH COMPACT - 140 x 184 x 158
125-3261	ATV320U40N4C	ATV320 4KW 400V 3PH COMPACT - 140 x 184 x 158
125-3230	ATV320D11N4C	ATV320 11KW 400V 3PH COMPACT - 180 x 330 x 198

MODICON CONTROLLER

- High degree of flexibility lets you add additional modules easily
- · SD card and USB port Run/stop switch and cartridge extension
- Ethernet and serial line
- Free program



Schneider Electric

806-6831	TM221CE16T	 	 		
806-6821	TM221CE24T				
806-6837	TM221CE16R	 	 		

REGULATED SWITCH MODE POWER SUPPLIES

- Power supplies for industrial use, rail
- · Reliable efficiencu
- · Diagnostics via front panel LED's



Schneider Electric

210-8398 ABLS1A24050

210-8396 ABLS1A24031

Browse thousands more products online za.rs-online.com

E5CC DIGITAL TEMPERATURE CONTROLLERS (48 X 48MM)

- · Large white LCD display
- 15.2 mm characters
- Dual PV/SV 4-digit display
- 50 ms high-speed sampling
- Short 60 mm housing case
- Easy connection to PLC with communications that require no programming
- Component communications can be used to link temperature controllers to each other
- Easy set up with CX-Thermo software (Windows XP, 7) without additional power supply via USB conversion cable



OMRON

760-4599 CURRENT OUTPUT 100-240V 760-5299 CURRENT OUTPUT 100-240V 760-5390 CURRENT OUTPUT 100-240V

ZEN LOGIC MODULE PROGRAMABLE RELAYS

- Increased functionality in a compact body (70 mm wide × 90 mm high).
- This single Unit easily provides relay, timer, counter, and time switch functions.
- Economy-type and Communications-type CPU Units have been added to series.
- Increased timing accuracy with a monthly deviation of ±15 s max.
 Multiple-day operation and pulse output operation have been added.
- Select from two power supply options: 100 to 240 VAC or 12 to 24 VDC.



2 CHANNEL DIGITAL DIN RAIL TIME

- Independent Day Keys provide easier operation.
- Temporary holiday setting function makes it easy to turn OFF output for holidays and non-operating days
- Settings can be made even with the Time Switch turned OFF
- Test mode enables easy program checking
- Complies with EMC Directives, UL/ CSA, and other safety standards
- Includes summer time (DST) adjustment. Yearly models also offer automatic switching to DST



OMRON

177-0111 100 → 240 V AC

H7EC COUNTER

- · Large totaliser display
- Self powered by internal battery which can also be replaced
- Key protected switch to prevent accidental reset switch operation
- · Dual operation mode
- Short body of only 48.5mm
- · Finger touch protection



OMRON

650-2984 ZEN 20 I/O 12-24VDC

F3S-TGR-CL SAFETY LIGHT CURTAIN

- Simple to wire, mount and configure
- DIP-switch setup for blanking, interlock function, muting and optical coding
- Floating blanking and Fixed blanking supported
- Muting function and muting lamp integrated
- Type 2 or type 4 acc. EN61496-1
- EN ISO 13849-1 ready
- Long range active/active system
- Sensing distance 0.2 to 6m (14 mm) and 0.2 to 14m (35 mm)





E5C2 ON/OFF TEMPERATURE CONTROLLER

348-1929 BEIGE CASE

348-1913 BLACK CASE

OMRON

- Supply voltage rating ranging from 100VAC to 240VAC.
- This controller has a width of 48mm and a height of 48mm. It has a K-type (0°C to 400°C) thermocouple input and relay output for ON-OFF control.
- It has thermocouple element lead wires that make soldering difficult due to its inability to sticking to the solder.



OMRON

535-0710 48 X 48MM, 100 → 240 V AC

OMRON

757-7715 TYPE 2,600MM



VITAL SAFETY CONTROLLER, BASE UNIT

- Cost-effective cable routing/ connections
- · Information output with two functions
- LED indication of: power supply, dynamic signal and outputs
- Detachable connector blocks
- Two NO safety outputs
- Manually supervised or automatic reset
- · Can accommodate long cable lengths
- Standard width: 22.5 mm



733-2483 TINA 7A ADAPTOR FOR OUTPUTS

733-2464 TINA 2A ADAPTOR FOR OUTPUTS

733-2468 TINA 3A ADAPTOR FOR OUTPUTS

JOKAB EVA GENERAL CODE

- 4 pieces of DA 2B spacer rings included
- · Yellow in colour.





176-0036 FOR USE WITH ADAM DYN, OSSD

JOKAB CABLE WITH CONNECTOR

- Shielded cable with connector is PVC coated.
- The conductor size is 22AWG. • Black oxide colour.
- Length is 20m
- M12 female molded 8-pin connector





176-0060 M12-C203 20M CABLE

PLUTO SAFETY PLC, BASE UNIT

- Simple and easy programming facilities
- Easy to configure and install
- Up to 640 I/O's





733-2461 TINA 1A BLANK PLUG FOR TINA 4A AND 8A R 1 032.95

SELECTOR HANDLES AND SHAFTS

- Shaft fitted to the disconnector to enable operation, used in conjunction with a handle
- Handles available in black or yellow/red



686-7373 HANDLE, SELECTOR TYPE, OT100 TO 125FT

686-7376 HANDLE, SELECTOR TYPE, OT16 TO 80FT

STAINLESS STEEL PUSH **BUTTON ENCLOSURES**

- ABB Compact Series
- 22mm Cutout Diameter
- IP65 rating



730-650 3 WAY

730-644 2 WAY 152 X 92 X 55MM

730-638 1 WAY 90 X 90 X 55MM

JOKAB INTERLOCK **SWITCH**

- · Reduce downtime
- No wear
- · No mechanical breakage
- · Easy to install
- · Local reset function
- Operating temperature ranges between -40°C and +70°C
- Suitable in harsh environments



176-0019 ADAM DYN-INFO M12-5 CONTACT

JSTD1 SERIES ONE- HAND CONTROL SWITCH

- 1NO/1NC contact configuration
- · Cable length is 0.2m
- Ergonomic
- · Low activation force
- Flexible mountingSeveral grip possibilities
- Highest safety level (category 4) Two-channel switching
- in each hand
- High mechanical life of 106 cycles
- Operating force is 2N
- · Actuator travel of 1.3 ±0.6mm





733-2332 JSTD1-B SAFEBALL W/ 0.2M WIRES

EMERGENCY STOP FOOT SWITCH

- Snap action switch with cover
- Visible operation
- · Electrically separated contacts
- · Rated impulse withstand voltage is
- Rated operational current at 230VAC is 3.14
- Operating temperature ranges between -10°C and 70°C





825-1720 IPS E-STOP FOOTSWITCH, YELLOW







Extremely compact control and switching

Relay system and logic relay system

Relay modules for every application and industry: with PLC-INTERFACE relay systems you will find the best solution. The logic relay system, PLC logic, combines relay and analogue modules with logic functions and intuitive software.

PHOENIX CONTACT has everything you need for best switching.

To view the full product range visit https://za.rs-online.com/web/b/phoenix-contact/



PLC-RSC SERIES

- Relays and opto-couplers for inputs and outputs with "pluggable" switching devices
- Four bridging slots to reduce wiring; bridging of up to 80 modules is possible
- Screw terminal connections
- LED indicators and diodes for coil suppression
- · 250V versions have a switched power rating of 1500VA
- Dimensions (WxDxH) 6.2 x 80 x 94 mm (Single pole, double pole 14mm wide)
- Operating temperature range -40 to +55°C
- Mechanical life (relays) 1 x 107 operations
- Wide range of accessories also available



4-WAY ISOLATED SIGNAL DUPLICATOR

- Configurable 4-way isolating amplifier
- Thin 6.2mm housing width
- Ex-zone 2 approval
- DIP switch allows configuration of up to 8 signal combinations
- Duplication of a standard analog signal on two current outputs



PHŒNIX

290-1422 SINGLE RELAY REL-MR- 60DC/21

290-1416 SINGLE RELAY REL-MR- 24DC/21

306-6592 MINIATURE SOLID-STATE RELAY - OPT-24DC/24DC/2

358-8301 RELAY MODULE - PLC-RSC- 24DC/21

PHŒNIX

489-2881 SIGNAL DUPLICATOR - MINI MCR-SL-UI-2I-NC

RIF-0 POWER RELAY MODULES

- · Easy wiring due to push in connection technology
- Easy handling and extension of range
- Plug in display/suppressor module
- 1 and 2 contact options



794-3765 12DC/1

794-3771 24DC/21

794-3780 12DC/21

MCR SIGNAL

· 3-way isolation

CONDITIONERS

• MCR series 3-way isolating amplifiers for

electrical isolation of analog signals.

• Fixed setting of input and output signals

801-6101 SIGNAL CONDITIONER - MCR-C-I-I-00-DC

• Processing of standard signals

Pluggable screw connection

INTERFACE RELAY, SERIES PR₁

- · Pluggable miniature relays, with power contact for high continuous current
- Varied switching current dependant on the relay chosen from the REL-MR series
- Pluggable miniature relay compact in
- · Additional hard gold plating
- AC and DC coil voltages
- · Robust and hard wearing



PHŒNIX

794-3761 24DC/1

PSRMINI SAFETY RELAY

- · Compatible with all important signal transmitters and safety-relevant systems
- Screw and push-in spring connection
- Automatic reset, Automatic/Manual reset, Automatic/Manual/Monitored reset, Manual/Monitored reset options available
- Up to 70% space saved
- · Easy and quick diagnosis means shorter downtime



893-7701 PSR-MC40-3NO-1DO-24DC-SC

PHŒNIX

508-0023 SINGLE RELAY - REL-MR- 24DC/21-21

OPTO-COUPLERS WITH SOLID STATE RELAY OUTPUT

- Dc in/Dc out, Dc in/Ac out and Ac in/Dc out versions available
- · Versions with switching speeds up to 100kHz available
- 2.5kVac input to output isolation
- · LED status indication
- Module width 6.2mm
- Operating temperature range: -20 to +60°C



533-0019 TERMINAL BLOCK - DEK-OE- 24DC/ 24DC/100KHZ





ENCLOSURES, FANS & THERMAL MANAGEMENT

AE COMPACT ENCLOSURES

- The AE series from Rittal is a compact stainless steel enclosure with an all-round foamed-in PU seal offering IP66 protection to IEC 60 529
- Protection category: IP66 to IEC
- 60 529, NEMA 4X and IK08 Stainless steel 1.4301 (AISI 304) enclosure and door
- Door opening angle approx. 130°





784-6125 300 X 300 X 210MM

TOPTHERM FILTER FAN

- Easy to assemble, highly efficient and a versatile unit that provides airflow of 66m³/h and supply voltage of 230VAC.
- It does not require any tools during assembly, exchange or maintenance.
- The fan module and power connection are simple to position to suit the needs of the application.





756-9767 66CU.M/H 230V

756-9777 120CU.M/H 230V 756-9802 250CU.M/H 230V

TOPTHERM SIDE AIR CONDITIONERS

- · Mounting on or in doors and side panels of enclosures with standardized mounting cut-outs.
- Integrated automatic condensate evaporation (except SK 3303.500), Nano coating condenser for easy cleaning and constant cooling capacity and efficiency.
- These air conditioners also use an intelligent operating system, turning fans on and off as needed to maintain precise temperatures while saving energy.





764-4127 WALL MOUNTED 230V 1600W

764-4124 WALL MOUNTED 230V 1100W

FAN FILTER MAT

- Temperature-resistant, up to 100°C $\,$
- Reliable filtering of dust from a particle size of 10µm
- Thickness is 17 mm
- · Air throughput is 105m3/h to 120m3/h





756-9887 177X177MM

756-9878 124X124MM

756-9880 224X224MM **756-9884** 292X292MM

FAN FILTER EXHAUST

- · Used for ventilation by convection.
- The outlet filter can be installed in the upper and lower sections of the enclosure.
- The filter frame is made of ABS material.
- · The filter is made of chemical fibre material. The filter is available with a length of 255mm and a width of 255mm. It is suitable for 177mm x 177mm and 224mm x 224mm fan size.





756-9865 224X224MM



EBM-PAPST, 230 V ac, AC AXIAL FAN

- Energy efficient AC fan with EC technology
- · Conversion and drive electronics fully integrated
- · Long service life
- Fan speed not dependent on line frequency
- · Electronic locked rotor protection



SLEEVE BEARING AXIAL FANS

- Electronic protection against reverse polarity
- Impedance protected against blocking and overloading
- Fibreglass-reinforced plastic
- Integrated electronic commutation



ebmpapst

912-6114 119 x 119 x 38mm, 146.1m³/h, 2.8W, IP54

ebmpapst

322-4445 40.9CU.M/H24VDC

HIGH PERFORMANCE BALL BEARING FANS

- Material: fibreglass-reinforced plastic
- Fully integrated electronic commutation
- · Protected against reverse polarity and locking
- Connected via single strands AWG 24, TR 64. Bared and tin-plated.



CENTRIFUGAL FANS AND BLOWERS -BACKWARD CURVED BLADES

- A solution to a wide range of application requirements and are ideally suited for intake suction use.
- Used for intake suction using backward curved blades, do not require a scroll housing - increasing of use and versatility.



ebmpapst

222-294 360CU.M/H 24VDC

ebmpapst

825-7686 220MM DIA, 115V

825-7670 220MM DIA, 230V

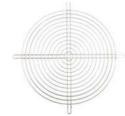
RADICAL EC CENTRIFUGAL FANS

- The ebm-papst RadiCal backward curved EC fan offers higher performance for less power.
- Low-pressure centrifugal solutions
- Fitted with highly efficient GreenTech EC motor
- Aerodynamic shape reduces noise emissions
- · Hybrid construction makes impellers highly corrosion-resistant
- EC control options available



AXIAL FAN FINGER GUARDS

- Industrial standard size zinc plated steel finger guards for axial fans
- 4 standard fixing points except 172 x 172 which has 2 points



BACK DRAUGHT SHUTTERS

- To prevent back draughts
- Lightweight blades and square opening provide maximum free area when the fan is operating
- Blades close under gravity when the fan airflow ceases
- All components are light grey and UV stabilised to provide a long life



ebmpapst

810-4131

ebmpapst

233-9401 225HX225WMM 581-470 127HX127WMM

ebmpapst

414-1802 630MM





IP66 STAINLESS STEEL WALL BOX WITH CHASSIS PLATE

- · AISI 304 Stainless Steel
- IP66 rating
- Fully wall mountable
- Lockable



842-8399	200X200X150MM
842-8412	240X180X150MM
842-8419	240X240X150MM
842-8434	240X360X150MM
842-8406	300X300X150MM
842-8370	300X300X200MM
842-8361	300X400X150MM
842-8342	300X400X200MM
842-8421	360X180X150MM
842-8380	400X300X150MM
842-8383	400X300X200MM
842-8409	400X400X200MM
842-8346	400X500X200MM
842-8374	500X500X200MM
	-

IP66 WALL BOXES

- Body material is AISI 304 stainless steel sheets
- IP66 rating
- Double lipped edges to ensure higher strength and ease of installation
- Easy to use, including removal of the door
- Door is fitted with a polyurethane gasket



758-6986	300X300X200MM
758-6974	300X400X150MM
758-6958	300X400X200MM
758-6999	400X300X200MM
758-6961	400X500X200MM
758-6992	500X500X200MM



IP66 SHEET STEEL WALL BOXES

- · Steel structure, coated with an epoxy polyester powder
- IP66 rating
- Enclosure and the door is made from sheet steel
- · Fully wall mountable
- · Pebble grey finish





775-5791 MS WALL BOX WITH BRACKETS/CHASSIS PLATES

METAL LOCK

- · An effective enclosure locking device with a 5mm Double Barb lock
- configuration. The cam is designed to provide a
- slide compression fit and operate through an angle of 90
- Bright chrome plated finish
- Cam lead-in ensures compression of sealing gasket
- Max panel thickness 6mm
- Grip length 25mm





842-8478 RONIS TYPE KEY 842-8469 T TYPE KEY

GRP WALL BOXES WITH GLAZED DOOR

- Fibre glass reinforced polyester nore grass reinforced polyester construction offering excellent durability, long life and self extinguishing properties up to 960oC
- Glazed door, ideal for viewing the contents
 of the wall box without unlocking
- Neutral light grey colour ideal for use in a range of applications
- Electromagnetic compatibility eliminating electrical contact risks
- High impact and harsh atmosphere resistance





192-7123 400X400X200M

CLEAR MAKROLON® FRONT

- Transparent lid with visibility to internal components
- Two-part, modular, glass fibre enclosures offering excellent protection
- Removable chassis plates included
- Self extinguishing, resistant to ozone, most oils, acids, bases and salts
- Temperature range -50°C to +160°C





IP66 370X300X175MM



We supply a wide range of pipes, tubing, hoses and more to suit your requirements.

Plumbing & Pipeline Highlights

Browse and shop the entire range of plumbing & pipeline products online at za.rs-online.com

POWER-ASSISTED CONTROL NORMAL MODULE

- Power-assisted control 2/2 NC and NO solenoid valves with floating diaphragm.
- · No minimum control pressure.
- · 238 series solenoid valves designed to eliminate water hammer when water is turned off.
- Brass body.
- Pluggable PG 11P connection.



306-1581 SOLENOID VALVE 2/2

DS6281-EV 2/2 **SOLENOID VALVE -BRASS BODIED**

- 0.1 4 second response time (dependant upon pressure)
- IP65 Rated (with cable protection)
- · Brass body
- · Quiet operation
- · Water hammer free design
- Compact installation length NPT / Rc connection ports
- 0.2 16 Bar pressure range



burkert

816-3168 3/4" SOL VALVE 20MM ORIFICE 24VDC

PERISTALTIC PUMP

- The Verderflex peristaltic, electric operated, self-priming, positive displacement pump has a maximum flow rate of 2200ml/ minute.
- The supply voltage is 24VDC
- Input power is 30W
- 2 roller design
- Cycology resin pump head with support bearing
- Tough ABS casing
- Thermally protected motor and cooling fan
- Repeatability is ±0.5%
- Metering accuracy is ±2% (dependant on size of dose)



AIR OPERATED POSITIVE DISPLACEMENT PUMP

- · Pump body is made of polypropylene
- Can running dry without damage
- High clearance check-valves for good solids handling
- Flow rate can be varied bu adjusting air inlet pressure
- · High suction lift up to 80m
- Robust design
- Stall free performance Oil free- no contamination



667-9182 132L/MIN

VERDERFLEX'

125-4041 8MM TUBE

ADVANCED POLYETHYLENE (APE) TUBING

- · 50% reticulated material
- · Balance between flexibility and pressure/temperature resistance
- Resistant to a wide range of aggressive chemicals
- · UV-stabilised: ideal for outdoor applications
- · Approved for contact with foodstuff and beverages



! legris

144-7831 BLACK 8X5,75 DRUM 150M

144-7829 BLACK 6X4 DRUM 150M

144-7828 INCOLOR 6X4 DRUM 150M





SINGLE PIECE REDUCED BORE BALL VALVE

- Reduced port, 1/4" 3" (DN8 DN80)
- W.P: 1000WOG (PN63)
- W.T: -20°C to 200°C (-4°F to 392°F)
- · Investment casting
- Blow-out proof stem
- Anti-static device (option)
- · Locking device
- Thread type: ASTM B1.20.1 (NPT) DIN2999 & BS21 ISO7/1 & EN10226





 499-2795
 1/2IN BSPP F-F

 499-2802
 3/4IN BSPP F-F

 499-2818
 1IN BSPP F-F

 499-2824
 11/4IN BSPP F-F

 499-2830
 11/2 INCH BSPP F-F

 499-2846
 2 INCH BSPP F-F



- · Connections are female screwed
- Modulating discharge
- Discharges condensate at steam temperature
- Unaffected by sudden or wide load and pressure changes
 Excellent air discharge
 (by thermostatic air vent)



720-9229 3/4IN. 14BAR FLOAT STEAM TRAP BSP

720-9232 1IN. 10BAR FLOAT STEAM TRAP BSP

HEAVY DUTY SELF-RETRACTING HOSE

- 180° pivoting wall bracket
- Includes carrying handle and 1.5m feed pipe
- 1/2inch BSPT male connector
- Auto lock fitted with rollers for smooth retraction



FRO

911-9447 10MM ID, 15M **911-9443** 8MM ID, 9M

REMOTE READING EXPANSION THERMOMETER

- 100 mm centigrade dial Dry Thermometer with bi-metal movement
- Supplied with a surface mounting back flange
- · Acrylic window with steel cover



431-5586 -20 TO +60DEGC&F

431-5592 0 TO +120DEGC8F

SPRAY GUN

- Adjustable screw to vary cone width from 0° to 60°
- Covered by semi housings of nonstainable shockproof plastic, entirely sealed and with 3 rubber protective rings
- Ergonomic construction
- Gun is suitable for use up to 24 bar,
- 2.4 MPs rated pressure pumps
- Inlet swivel connection
- Internal structure in made of brass and stainless steel
- Plastic trigger protected by hand guard





175-6264 1/2" BSPF

STAINLESS STEEL BALL VALVE WITH ELECTRIC ACTUATOR

- Body CF8M 316 S/S
- Ball 316 S/S
- Stem Seal PTFE
- Ball Seal PTFE
- 1,000 PSI Rated
- · Enclosure Rated Weather proof IP67
- Motor: 24Vdc
- Multi voltage 24Vdc, 95-240Vac
- Limit Switches 2 x open/close SPDT, 250Vac 6A rating
- Auxiliary Limit Switches 2 x open/ close SPDT, 250Vac 6A rating
- Indicator LED lamp Indicator (Open/Close)





760-5700 1/2IN. BSP S/STEEL

760-5687 1IN. BSP BRASS

INDUSTRIAL SOLENOID VALVES

- Made from forged brass
- Pilot operated
- Choice of 230 V ac or 24 V dc operation
- 2 port, normally open (NO) and normally closed (NC)
- Liquid or gas use
- Full range of sizes from 3/8 in to 2 in





144-0812 SOLENOID VALVE 1/2" NO 220VAC

SILICONE TRANSPARENT TUBING

- Flexible silicone tubing is suitable for use in most peristaltic pumps
- Length of 3 m
- Bore size of 3.2 mm
- Suitable for contact with food
- Peristaltic pump compatible
- Density of 1.16 g/cm³
- Shore A hardness of 62
- Elongation of 385% (approx)



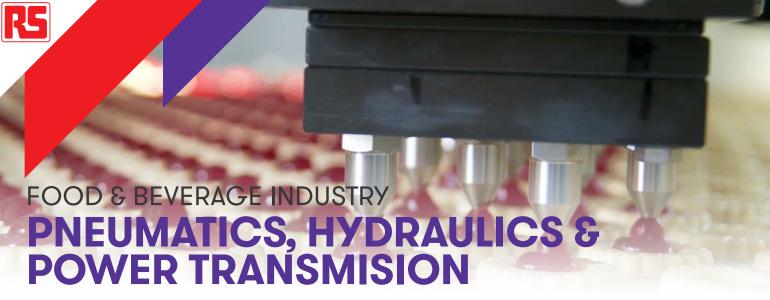
PRO

667-8444 3.2ММ ВОRE

667-8448 4.8MM BORE

667-8457 6.4MM BORE

667-8450 8MM BORE



A wide range of pneumatic and hydraulic parts, components and solutions you need for creating a purpose-built system or parts to update, maintain or repair your current system.

Pneumatics, Hydraulics & Power Transmision Highlights

SKF FOOD LINE STAINLESS STEEL DEEP GROOVE BALL BEARINGS

- Prelubrication with high-quality grease registered by NSF as category H1A nitrile rubber seal material that is coloured blue for optical detectability and is compliant with FDA and EC recommendations
- Stainless steel (440C) for inner ring, outer ring, rolling elements and cage
- Stainless steel backing plate for the seal

SMT/SME-8M SERIES T-SLOT PROXIMITY SENSORS

- Compatible with all Festo T-Slots
- 24 V dc Operating Voltage
- · Non-contacting or contacting sensing





SKF

125-1229	10MM DEEP GROOVE BALL BEARING 26MM O.D
125-1240	20MM DEEP GROOVE BALL BEARING 47MM O.D
125-1236	8MM DEEP GROOVE BALL BEARING 22MM O.D
125-1241	25MM DEEP GROOVE BALL BEARING 52MM O.D
125-1242	30MM DEEP GROOVE BALL BEARING 62MM O.D

FESTO

121-5824 3 WIRE 0.3M

SHAFT COLLAR TWO PIECE CLAMP SCREW

- The clamp style design does not mar the shaft, is easy to remove, and is indefinitely adjustable.
- Is commonly used for guiding, spacing, stopping, mounting, and component alignment.
- Equipment
 manufacturers benefit
 from the tightly
 controlled face to bore
 perpendicularity of
 Ruland shaft collars,
 TIR of ≤ 05mm.



SKF CAHB-10 SERIES LINEAR ACTUATOR

- Compact design
- Robust and reliable
- Designed for harsh environments
- High load capacity
- Lubricated for service life
- Durable, lightweight and corrosion resistant



RULAND®

174-6784 40MM OD 60MM W 15MM

EMELLIX

764-3477 LINEAR ACTUATOR CAHB-10 STROKE 50MM 24V



motion?... plastics! for the food and beverage industry











iqubal® spherical Bearings









tribo-tape Low friction Liner







^motion plastics ood indus

conveyor rollers

chainflex® Dynamic cables

Lubrication-free, hygienic, Food Grade

- easy to clean
- corrosion and chemical resistant
- ▶ lightweight
- ▶ high-performance plastic that offer safe and reliable operation



CLEAN DESIGN CYLINDER FOR FOOD INDUSTRY

- Hygienic and self-adjusting PPS cushioning
- Easy-to-clean cylinder profile without corners and indents
- · Corrosion-resistant cylinder surface
- Standard dimensions and mounting accessories to ISO 15552
- NSF-H1 lubricant and special wiper seal (characteristic A3) suitable for contact in the food area. Long service life even with insufficient lubrication due to frequent cleaning processes





FESTO

Search 'dsbf' or scan QR code for over 100 product options

COMPRESSED AIR ACTIVATED CARBON FILTER

- · Fully automatic monitoring and regulation of compressed air supply
- · Automatic shut-off of the compressed air in stand-by mode
- Detection and notification of leakages
- Condition monitoring of relevant process data



202-3518 3/8-R 202-3354 1/2-U **202-3353** CARTRIDGE

202-3404 AKI CARTRIDGE 202-3398 1/2-R

202-3377 1/2-R-Z

202-3327 1/4-R

202-3362 1/4-U

HYDOLYSIS RESISTANT TUBE

- Hydrolysis-resistant and suitable for water applications.
- Combination suitable for use in cleanrooms, FDA-compliant and corrosion-resistant as it is made of 100% polymer.
- Very easy to install thanks to the "one click principle





COMPRESSED AIR FILTER-REGULATOR

- · Vertical assembly position
- Manual rotary condensation drain
- · Standard nominal flow rate of 5.600 I/min
- Optional mounting type of front panel or line installation
- G1/2 pneumatic connection
- Aluminium die cast housing material
- Rotary knob with lock actuator



FESTO

121-5670

SOLENOID CONTROL VALVE

- · In-line valve designed to be used without pneumatic linking. All pneumatic connections are on the valve and can be equipped with fittings/tubing.
- Piston spool with sealing ring design principle
- 5/2 Way Monostable valve function
- Internal pilot air supply
- G1/4 thread pneumatic connection



FESTO

121-5898 5/2 WAY

ANGLE SEAT MEDIA VALVE

- Modular, hygienic design, insensitive to dirt
- Quick and easy maintenance
- Control of medium flows (gaseous and liquid) in closed and open circuits The angle seat valves VZXA
- are simple and sturdy and are thus perfectly suitable for almost all media with a viscosity of up to 600 mm²/s The angle seat valves
- VZXA made from stainless steel with PTFE seals have high chemical and thermal resistance Also suitable for
- vacuum applications
- Temperature of medium -30 ... +200°C



FESTO

Search 'vzxa' or scan OR code for over 20 product options



COMPRESSED AIR FINE FILTER

- Fully automatic monitoring and regulation of compressed air supply
- Automatic shut-off of the compressed air in stand-by mode
- Detection and notification of leakages
- Condition monitoring of relevant process data



FESTO

Search 'ms6-lfm' or scan QR code for over 30 product options



FOOD GRADE PNEUMATIC FITTINGS

- · Effortless selection of the right fitting.
- Festo offers a secure solution for every connection.
- The convenient push-in fitting system includes well over 1000 types function fittings.



FESTO

Search 'npqh' or scan QR code for over 150 product options



FDA APPROVED PINCH VALVE

- The pinch valve is a 2/2-way valve used to control liquid and powdery media, solids as well as a mixture of substances
- Easy-to-clean housing (clean design)
- · Open or closed in normal position
- Shut-off element
- made of elastomer



FESTO

Search 'vzqa' or scan QR code for over 30 product options





over 50 product options

Air quality that continuously meets ISO standards for the food industry





The right compressed air quality every time.

If you want to improve the reliability of your systems, you need to look at your compressed air supply. In the food and beverage industry, strict demands are made of compressed air quality in order to ensure the highest possible level of food safety.

The ISO 8573-1:2010 standard defines maximum permissible levels of particles, water and oil which may be present in compressed air for various applications.

Festo can tailor air preparation precisely to your application. Just combine the highly functional service units from our MS series to obtain air preparation which precisely delivers the air quality you require. **Get your filtration systems up to standard and meet purity-class requirements with Festo!**



www.festo.com

PNEUMATIC AIR PREP, ELECTRIC ACTUATORS & SWITCHES



CFM PNEUMATIC CABINET COOLER

- Uses compressed air at 5-7 bar
- Fits into a 3/4 in BSPP (British Standard Parallel Pipe) clearance hole in the cabinet wall
- Maximum flow rate of 35 CFM
- Maximum cooling capacity of 1,500 Btu/h
- Fed through 1/4 in BSP air inlet
- · Pressure relief valve
- Height of 196 mm
- Diameter of 45 mm
- Stainless steel body
- · Control device not included
- Conforms to ANSI/ESD S20.20:2014 and BS EN 61340-5-1:2007 Electrostatic Control Standards





291-5386 1500BTU/H 35CFM

VACUUM PRESSURE GAUGE OBAR

- Maximum Pressure Measurement 0bar
- Vacuum Pressure Gauge Type
- Gauge Outside Diameter 100mm Stainless Steel Case Material
- Minimum Operating Temperature
- -40°C
- Maximum Operating Temperature +60°C



188-986 0-30HG

F4 SERIES ADJUSTABLE PRESSURE SWITCH

- Fitted with a mechanical stop to prevent damage from over pressurisation
- Can be mounted in any orientation
- 90 Cycles/min switching frequency
- Long mechanical life (10^6 cycles at 70bar)
- 0.5A maximum load (at 250 VAC)
- Accuracy 4% of set pressure
- Fixed Hysteresis 10-25% (Dependent upon version)
- DIN 43650 Electrical connection



297-0052 1-12 BAR

297-0046 0.2-2.5 BAR

ELECTRIC LINEAR ACTUATOR

- Input voltage 24V DC
- Max. load 500N (push/pull)
- Speed: 13.5 mm/s (full load) 14.6 mm/s (no load)
- Stroke length: 100 mm
- · Aluminium grey in colour
- · Quiet yet powerful
- · Preset limit switches
- · Minimal operational costs
- Energy efficient



177-4490 24V DC, 100MM STROKE

K3 SERIES ADJ HYDRAULIC PRESS SWITCH

- · Adjustable via a screw located in the centre of the instrument
- Incorporates a mechanical stop providing over-pressure protection for spring and microswitch
- DIN 43650 connector



363-5968 1-10 BAR K3 SERIES

296-9989 2-40 BAR K SERIES

PNEUMATIC CABINET COOLER

- Pressure range of 5-7 bar
- · Cools cabinet volumes of up to 2 m3
- Maximum flow rate of 35 CFM
- Maximum cooling capacity of 1,500 Btu/h
- Diameter of 45 mm
- Height of 333.5 mm
- · Stainless steel body
- Control device not included
- Conforms to ANSI/ESD S20.20:2014 and BS EN 61340-5-1:2007 Electrostatic Control Standards



445-3060 1500BTU/H 35CFM

AUTOMATIC DRAIN VALVE - 240V 50HZ

- · Precise self-activated control of fluids and air to a specified programme (media: air, gases, oo, oil etc.)
- Automatically opens for a set time to drain condensation
- Length of time open (0.5 to 45 minutes) and frequency both adjustable
- Discharge time 0.5 to 10 seconds
- · Minimal risk of internal blockages due to increased internal tolerances
- · LED indicator for operational status





725-125 AUTOMATIC DRAIN VALVE

STANDARD DUTY **POLYURETHANE TUBE**

- · Highly flexible, cut and abrasion
- · Silicone free
- · Ideal for pneumatic control and chemical transfer lines





BLUE, 5MM ID, 8MM OD BLUE, 9MM ID, 12MM OD

917-2400 CLEAR, 4MM ID, 6MM OD

917-2371 BLACK 7.5MM ID 10MM OD









DOUBLE UNIVERSAL JOINT WITH NEEDLE BEARING

- · Carbon steel universal joints for connecting equipment where there is a misalignment greater than 5 degrees up to an angle of 90 degrees.
- Fitted with needle bearings lubricated for a lifetime and requiring no maintenance, suitable for applications with speeds of up to 4000 rpm.
- Smooth and silent operation, suitable applications include connection of conveyers, line shafts and drive shafts.



790-6807	10MM BORE
790-6813	16MM BORE
700-6823	25MM BORE

CHAIN TENSIONER CTC

- · Considerably reduces drive vibration and noise.
- Is truly "fit and forget" enabling high drive reliability and very low maintenance





901-0053 DIN CODE 12B-1, 420N 901-0047 DIN CODE 08B-1, 250N

STAINLESS STEEL **DEEP GROOVE BALL BEARINGS**

- Shielded
- Good radial load capacity
- · Ideal for high speeds
- · Long operating life



188-3293	15X35X11MM
188-3295	20X47X14MM
188-3281	15X32X9MM
188-3331	25X52X15MM
893-7272	25MM ID 47MM OD
000 7000	0141410 001414 00

SHAFT SEALS

- Replaceable without damage to the housing bore
- No need for circlips, sealants or retaining plates



PRO		
211-9005	25X35X7MM	
211-9011	25X47X7MM	
211-9027	25X52X10MM	
211-9055	30X40X7MM	
211-9061	30X42X7MM	
211-9162	40X55X7MM	
211-9067	20Y3EY7MM	

O-RING KIT VITON®

- Essential for all workshops and onsite service engineers
- Range of sizes no need to purchase individual O-Rings
- Quick identification and easy storage for multiple O-Ring sizes
- Robust casing suitable for
- The kit contains 510 pieces in 18 different sizes
- 75 Shore A
- · The material of the rings are resistant to petrol, oil and hydraulic oil
- Viton® A O-rings have a high chem and temperature resistance alongside a low compression set



756-040 IMPERIAL 245-9628 METRIC

DELRIN SPUR GEARS

- Tensile strength 94N/mm²
- Hardness (Rockwell R) 110-120 20° Pressure angle



521-6991	SPUR GEAR - 0.5 MODULE 15 TEETH
521-7231	SPUR GEAR - 0.8 MODULE 12 TEETH
521-7455	SPUR GEAR - 0.8 MODULE 80 TEETH
521-6064	MITRE GEAR,1.5 MODULE

NITRILE O-RING CORD

- An economical and versatile solution for creating seals on the job.
- You can use it for applications as diverse as engines and beer taps.
- Length of 8.5 m



I-IXE		
138-1600	DIA. 2MM	
138-1602	DIA. 3.5MM	
138-1604	DIA. 4.0MM	
138-1605	DIA. 4.5MM	
138-1607	DIA. 5.33MM	
138-1606	DIA. 5MM	
138-1608	DIA. 6MM	
138-1610	DIA. 8MM	
		_

STAINLESS STEEL **SHAFT COLLARS**

- · Industry standard
- · Interchangeable
- Common type
- · Anti-corrosion finish





122-3452	BORE 12MM	
122-3453	BORE 14MM	
122-3455	BORE 16MM	
122-3456	BORE 18MM	
122-3457	BORE 20MM	
122-3460	BORE 25MM	
122-3461	BORE 30MM	
122-3449	BORE 6MM	
122-3450	BORE 8MM	

GREEN ROUND POLYURETHANE BELT

- Hardness of 88 Type A
- Minimum operating temperature of -30°C
- Maximum operating temperature of +80°C
- Not food certified





309-8123	5M L X 5MM DIA
309-8139	5M L X 6MM DIA
309-8145	5M L X 8MM DIA



Quality tools, fasteners & fixings, adhesives, sealants, tapes and more to get the job done.

Tool & Consumables Highlights

NIPPER CABLE CUTTER

- Black corrosion resistant pliers Polished head
- Plastic coated handles
- · Length 280 mm

FX600 SOLDERING IRON

- Lightweight, ergonomic handpiece
- · Compact size
- Suitable for SMD and Through hole applications

XCELITE FINE POINT DIAGONAL KNIFE BLADE

- · Scalpels for delicate work
- Knurled end for more secure handling and a firm grip









136-7418 END CUTTING

TRANSPARENT LIQUID SUPER GLUE FOR ELASTOMER

- Low viscosity instant adhesive
- Ensures uniform fast-fixturing of 'difficult' rubbers and elastomers
- Bonds polyethylene, polypropylene and polyolefin plastics when used with Loctite 770 Primer



LOCTITE.

514-600 20 G



768-8985 50W

TEMFLEX 1755 RUBBER BLACK CLOTH TAPE

- PVC insulation tape with good electrical and mechanical properties
- High dielectric strength 40 kV/mm
- Self extinguishing
- Good resistance to abrasion, moisture, alkalis, acids, corrosio, varying weather conditions and ultraviolet exposure



3M

840-9026 19.1MM X 18M, 0.33MM THICK



675-6709 FINE POINT DIAGONAL (PACK OF 5)

FOOD SAFE SILICONE SEALANT PASTE

- Conforms to BS5889 Type B
- Fast cure
- High modulus-acetoxy cure type



Dow Corning®

459-0232 310 ML CARTRIDGE





METRIC WORKSHOP RANGE JOBBERS DRILLS

- 5% Cobalt High-Performance HSS-E Drill bits.
- High-Temperature strength without sufficient coolant
- 135° non-slip split point for precise centring
- · Direct drilling without the need for prior centring or drilling a pilot hole
- Cuts faster and lasts longer than regular HSS drill bits
- 0.5 mm increments





1-13MM

216-678 1-10MM

VDE ELECTRICIANS TOOL KIT

- · Ergonomic multi-component handles
- Optimum balance of torque and
- High quality and professional tools
- VDE approved for electrical safety
- Made from chrome vanadium steel
- Ideal for a wide range of applications
- Sturdy tool case





734-8885 88PC 1/2IN. SOCKET & VDE TOOL KIT

SWITCH KEY UNIVERSAL **WRENCH**

- Multi-purpose enclosure key wrenches designed for use within maintenance & service applications
- The four arms of the tool offer five differing drive possibilities
- Available with either a bright chrome or zinc plated finish





439-3025 ZINC FINISH

439-3019 CHROME FINISH

UNIVERSAL CABINET CROSS WRENCH KEY

- Multifunctional tool convenient and easy to use on many utility systems
- Unique adapter that converts to an emergency screwdriver
- 8 different key types
- Solid die-cast construction
- · Double-ended screwdriver bit with PH1 and $1\,x$ 7mm Slotted ends
- Adaptor attached to create a pocket screwdriver
- 6 and 8mm square, 9mm triangular and 5mm double-pin type keys





841-7005 70MM X 14MM X 70MM

TUBE CUTTER

- Easy to handle
- Polyacetal body stainless steel blades
- · Precise design
- Ruggedness
- · Simple to use





172-8969 3MM - 15MM

RETRACTABLE AUTOMATIC KNIFE STANDARD BLADE

- · Aluminium-bodied safety knife with automatic blade retraction
- When cutting, the blade remains outside the body, but when pressure is relaxed the spring loaded blade retracts into the handle
- · Supplied with one blade





615-9164 AUTOMATIC

HYDRAULIC PULLER SET

- High quality, forged steel provides superior reliability and service
- Precise hydraulic control allows fast, efficient and safe pulling
- Comes in a carrying case
- 8-ton hydraulic power unit
- Portable





349-7261 25 PIECE

LATCH CLAMP

- · Large and quick opening
- Galvanized and passivated
- · Rivets made of stainless steel
- Bearings are pre-lubricated
- · Ergonomic, oil-resistant handle with large grip surface and soft components





254-800 200NM

AUTOMATIC WIRE STRIPPER

- · Precision carbon steel laminated stripping blades
- Compact pistol grip design for increased control and a smooth stripping action
- Adjustable sliding wire stop to preset exact stripping lengths
 Shielded cutter for safety
- Constructed from high grade polymers and Carbon Steel for durability and long tool life





243-257

197 MM 0.2-6SQ.MM









PALLET WRAP

• Stretch and seal food grade film supplied with re-usable handle







329-5920 100MMX 100M (PACK OF 10)

TRANSLUCENT SQUEEZE **BOTTLE**

- Squeeze bottle for use with cleaner, oil, solvent and other liquids
- · Capacity of 225 ml · Translucent colour
- Made from polypropylene (PP)
- Can release single drops or fine streams



548-4289 225ML

BLACK SELF AMALGAMATING TAPE

- · Easy unwind
- · Extremely flexible
- Resistant to water, ozone and UV
- Excellent low and high temperature performance
- Excellent conformability to awkward shapes
- Breaking load is 20.0N/cm
- Elongation is 600%



146-8998 25MM X 10M

COIN/BUTTON CELLS, SILVER OXIDE

- Higher the capacity the longer life
- Non-Rechargeable
- Wide operating temperature range
- Resistant to vibration, shock and acceleration
- Stable and steady performance and feature low internal resistance





RS SR44 COIN CELL BATTERY, 1.55V

BLACK PVC SEALING STRIP

- High strength adhesive to keep foam in place during assembly
- Excellent resistance to weather, fungi and oxidation ensures a long seal life
- Closed cell construction gives a positive seal at only 30% compression and requires less material to seal than open cell foams
- Easy peel liner prevents stretching during installation
- · Single-Sided Tape
- · Various applications, air conditioning, telecommunications, aircraft, marine and automotive industries



205-0906 25MM X 10M, 10MM THICK

A4 STAINLESS STEEL PLAIN WASHER-METRIC

- · RS PRO washers are an essential part of any fastener assembly, as they serve to incorporate spacing and distribute load when placed between a nut and
- These washers will help prevent wear and distortion of installation surfaces over time.





М8

LEAD ACID RECHARGEABLE BATTERY

- 5 years standby design
- · Float Standby use
- · Low gas emissions 99% plus recombination
- Excellent recovery from deep discharge
- Leak-proof Sealed lead acid (SLA) battery
- ABS resin case to UL94-HB fire resistance (Horizontal Burning Test)
- Road transport to UN2800 (Batteries Wet, Non-Spillable)
- Air Transport to Special Provision 'A67' 'IATA' & 'ICAO'. (Batteries, Wet, Non-Spillable)





537-5488 RS SEALED LEAD-ACID BATTERY,12V 7AH

A4 STAINLESS STEEL HEX NUTS - METRIC

- · Ideal for use in chemical processing equipment and marine environments due to its higher resistance to tarnish and corrosion.
- Metric hex nuts
- To DIN934
- A4 grade 18/8 stainless steel (Type 316 S16) long lasting
- Good resistance to corrosion and saltwater
- Due to the hexagon nut having six sides it makes it easier to work with and is very versatile
- Easy to tighten and loosen





189-591 189-585 М5

COLOPHONY-FREE TIN/ LEAD SOLDER WIRE

- · Versatile soldering wire that can be used for a wide range of soldering tasks
- · Alloy used consists of 60% tin and 40% lead
- Melting point between 183-188°C
- Low odour formulation with 1.1% flux content
- Soldering iron typical tip temperature for this solder wire is 320-360°C





800-7661 0.7MM

756-8871 0.4MM

