Save time shopping around, go online today.

Do business online with RS and make it faster and easier to find exactly what you need with all this information available at the click of a button.

My Account
All your orders, parts lists and details in one place

Stock Availability
Not only does our website tell you if the product you require is in or out of stock in the UK, it also tells you if the quantity you require is available.

Access to over 200,000 products
The full range of products are online and searchable at a click of a button.

Over 90,000 technical documents
We hold over 90,000 technical documents and datasheets online, saving you valuable time. You can choose to print them off, save them to a PC for quick reference or even email them to a colleague.

Leading Search
Let our online search help. Simply enter a description, stock number, manufacturer’s part number or name and we’ll return matching products in an instant. Refine your results by category, manufacturer or RoHS compliance and we’ll find what you need quickly.

Parts List
This is a useful tool if you regularly order the same products. You can build your own lists, adding or deleting products as required, allowing for easy re-ordering.

13 month Order History
By placing your orders online, you can benefit from being able to search through your entire online order history for the past 13 months.

Visit www.rs-components.com to find the right product for you.

Terms and Conditions: All products in this issue are sold subject to the full terms and conditions of sale set out in the RS Catalogue. All offers are available while stocks last. RS is a registered trademark of RS Components Limited An Electrocomponents Company.
Welcome to the World of PHOENIX CONTACT

Welcome to Focus On Automation

Trusted by over 1.6 million engineers worldwide, RS is committed to helping you find what you need fast.

Leading brands
We offer the widest range of products from a single source.

Assured delivery
You can be sure of immediate despatch, so you can get on with running your business.

Free technical support
From product identification through to queries on product applications, our technical support is only a phone call away.

Order online at www.rs-components.com or contact international sales

CONTeNTS

04 WHAT’S NEW IN AUTOMATION
07 SCHNEIDER ELECTRIC
08 FLOW METERING & LEVEL CONTROL
10 ABB
11 HARTING
12 RS BRAND
14 CROUZET
15 E2S
16 HAZARDOUS AREAS
18 AUTOMATION BRANDS
20 MAINTENANCE ACCESSORIES
22 PHOENIX CONTACT

Welcome to the World of connection and automation technology, electrical interface technology, and surge protection. Together with our customers and partners, we offer these applications in over 70 countries worldwide. When it comes to joint project management, assistance during installation and startup, programming support or practical training contact us – anytime, worldwide!

For additional information visit www.phoenixcontact.com

Log onto our website and find over 200,000 products and lots more helpful information.

Stock availability
Check online if the product and quantity you require is in stock

Allied Electronics range
Extra 50,000 products available online from our sister company

Info zone and online tools available
• Online technical help
• Unit converters
• Energy saving calculator
• IP ratings

Visit www.rs-components.com today

www.rs-components.com
What’s new in automation?

RS continues to develop its relationship with all the key manufacturers in the Process Control and Automation industry. Our April 2009 International catalogue has introduced 1530 NEW products and below are some highlights of new technologies from our catalogue and website offer.

COMPACT COLOUR HMIS

The rise of the human machine interface continues with compact 3.5 to 5” touch screen HMIs becoming the most popular replacement from traditional pushbuttons and displays.

New ranges from both ABB and Schneider Electric both incorporate Ethernet connectivity, animation functions and multi-PLC platform compatibility.

<table>
<thead>
<tr>
<th>ABB</th>
<th>Schneider Electric</th>
</tr>
</thead>
<tbody>
<tr>
<td>517-381</td>
<td>Schneider 3.8in</td>
</tr>
<tr>
<td>476-955</td>
<td>ABB 3.7in</td>
</tr>
</tbody>
</table>

ADVANCED SAFETY CAMERA SOLUTION

SICK have launched a new V300 safety camera that can be used instead of light curtains to protect a machine access. The camera uses CCD technology, reflective strips, and an innovative touch ‘n’ teach system to allow the system to be installed in minutes without special tools or training.

<table>
<thead>
<tr>
<th>SICK</th>
</tr>
</thead>
<tbody>
<tr>
<td>480-904</td>
</tr>
</tbody>
</table>

RFID PRODUCT TRACKING

Where barcodes were once the only option, new product tracking solutions from both Omron and Schneider Electric use battery-free tags attached to a product or assembly. These are read or updated during the process using radio frequency technology allowing process changes or detailed tracking information to be quickly transferred to the control system.

<table>
<thead>
<tr>
<th>Omron</th>
<th>Schneider Electric</th>
</tr>
</thead>
<tbody>
<tr>
<td>503-401</td>
<td>Omron V680 ID tag</td>
</tr>
<tr>
<td>503-417</td>
<td>Omron V680 ID controller style</td>
</tr>
<tr>
<td>521-217</td>
<td>Schneider Ositrack compact station format D</td>
</tr>
<tr>
<td>521-229</td>
<td>Schneider Ositrack tag format E 256 bytes</td>
</tr>
</tbody>
</table>

PRODUCT DEFECT DETECTION WITH VISION SENSING

With demands or production lines increasing and the requirement for zero defects smart vision sensing solutions have come of age. The ZFV vision system from Omron can learn what a fault free product looks like, then compare this with what it sees passing on the production line and advise the control system and operators of any suspect products.

<table>
<thead>
<tr>
<th>Omron</th>
</tr>
</thead>
<tbody>
<tr>
<td>470-373</td>
</tr>
</tbody>
</table>

LCD VIRTUAL ANALOGUE PANEL METERS

Trumeter have used LCD technology to take the analogue panel meter into the 21st century. Combining the read at a glance usability of an analogue meter with the precision of a digital readout, at a cost effective price.

<table>
<thead>
<tr>
<th>Trumeter</th>
</tr>
</thead>
<tbody>
<tr>
<td>553-771</td>
</tr>
<tr>
<td>553-497</td>
</tr>
</tbody>
</table>

EFERGY WIRELESS ENERGY MONITOR

This innovative wireless monitor uses a clip-on current transformer and sender to transmit current flow information to the portable monitor. This then displays energy usage (kWh), and estimated CO² footprint instantaneously. The unit continually records how much electricity is being used and the data can be viewed as daily, weekly or even monthly allowing you to track your energy consumption.

<table>
<thead>
<tr>
<th>Notifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>513-288</td>
</tr>
</tbody>
</table>

7TH GENERATION LOGO!

Siemens have launched the 7th Generation of their popular LOGO! logic controller range. This time complemented by a text display and operator control panel option.

With full previous generation code compatibility and more powerful features the LOGO! now has the performance of a compact PLC at half the price.

<table>
<thead>
<tr>
<th>Siemens</th>
</tr>
</thead>
<tbody>
<tr>
<td>495-766</td>
</tr>
</tbody>
</table>
Merlin Gerin and Telemecanique become Schneider Electric

Selection becomes simpler, the guarantee of equipment compatibility is reinforced and the integration of recently acquired technologies is optimised. The products themselves will remain the same.

With a single brand, Schneider Electric confirms its presence as a global specialist in energy management. With a network close to you and fast-responding teams, we commit to help you make the most of your energy, improve your efficiency and ensure the sustainable development of your businesses.

New packaging
Starting in 2008, all product ranges will start to use the new Schneider Electric packaging, on which the name of the brand and the range are highlighted.

Only the visual design changes. All other specifications will be the same: carton sizes, batches, lot quantities, weights, references...

New product marking
Gradually all major product families will be marked “Schneider Electric.”

Only the product marking visual design changes. All the other specifications will remain the same: technical features, function, weight, quality, commercial reference, technical information...

Changes will be progressive, done by product family

From now on, you might see

Schneider Electric packaging containing products marked Merlin Gerin or Telemecanique.

Schneider Electric packaging containing products marked with the Schneider Electric brand. This is the ultimate objective.

The logo found on the sticker on the outside of the product’s packaging is the same as the logo on the product found inside of the box.

If you would like more information about this transition please visit rswww.com/schneiderelectric
Process management in food manufacturing

Food is manufactured all over the world and often involves a multi-stage process from raw product to finish, packaged foodstuffs.

The raw product will arrive in flour or grain form and is often be mixed with a fruit, sugar, juice, milk or water during the production process. As with any good recipe you need to be sure the ingredients are mixed in the correct quantities to create a high quality end product. To keep the process running correctly and prevent substandard product or loss of production machines use a combination of flow sensors, flow switches and level sensors. These work together with the control system to regulate the quantity of each ingredient entering the process, and provide operators with information on the amount of raw product left in hoppers, tanks or other storage containers.

The following pages help explain different types of flow and level sensing technologies and which method is most suited for. Please refer to sections 47-56 in our International catalogue for product ranges in process control and automation, or visit our website for the full offer.

Level sensing techniques

With so many different level sensing technologies available it can be a challenge understanding the benefits of each and which one best meets your needs.

<table>
<thead>
<tr>
<th>Level Sensing Technique</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultrasonic Doppler Flow Meter</td>
<td>Easy to install, cost effective, accurate, non-invasive, and does not require calibration.</td>
</tr>
<tr>
<td>Calorimetric Flow Meter</td>
<td>Suitable for high temperature usage with opening temperatures up to 180°C.</td>
</tr>
<tr>
<td>Vibrating Level Probes - Squinings</td>
<td>Basic full/empty type level indication set by mounting position, various formats available.</td>
</tr>
<tr>
<td>Capacitive Level Switch</td>
<td>Basic full/empty type level indication set by mounting position, suitable for all types of fluids.</td>
</tr>
</tbody>
</table>

Turbine Flow Meter

Operation

Different designs of turbine flow meters exist, all employing the same simple principle: if a fluid moves through a pipe and acts on the vanes of a turbine, it causes them to rotate and the rate of rotation can be measured to calculate the flow.

Benefits

Turbine flow meters are often low cost, and can provide very accurate readings – particularly in low viscosity liquids.

Ultrasonic Doppler Flow Meter

Operation

These flow meters use ultrasonic sound pulses and the Doppler principle to measure the direction and velocity of fluid flow. If a fluid is moving towards a transducer, the frequency of the returning signal decreases. This difference is used to calculate the rate of flow.

Benefits

An ultrasonic flow meter has the advantage of being non-invasive, having no moving parts, is unaffected by contaminants and is suitable for virtually all liquids.

Calorimetric Flow Meter

Operation

The calorimetric principle for fluid flow measurement is based on two temperature sensors in close contact with the fluid but thermally insulated from each other. One of the two sensors is constantly heated and the cooling effect of the flowing fluid is used to monitor the flow rate. In a stationary (no flow) fluid condition there is a constant temperature difference between the two temperature sensors.

Benefits

A calorimeter flow meter can generally be used with water, oil or air depending on the body materials, and can achieve relatively high accuracy at low flow rates. Installation is directly into the flow via threaded socket or the addition of a T-piece.

Ultrasonic Level Sensor

Operation

Uses ultrasonic sound pulses that are reflected by the surface of the liquid. Provides proportional indication of level via a 4-20mA or 0-10V output. Typical range 0.25 to 10m. Provides accurate level indication, but can be affected by dust or foam.

Benefits

Can only be used with conductive fluids. Can be used for waters, emulsions, oils, chemicals, effluent, solids but range reduced by 50%.

Microwave Level Sensor

Operation

Uses microwave pulses that reflect off the surface – the same principle as radar. Available in guided or non-contact versions. Unaffected by dust, foam, vapours, pressure or product build-up. Provides proportional indication of level via 4-20mA or 0-10V output. Typical range 0.15 to 30m.

Benefits

Can be used for: Liquids, Powders, Granular products.
ABB is a global leader in power and automation technologies that enable utility and industry customers to improve their performance while lowering environmental impact. The April 2009 catalogue contains over 350 products and the website over 3000 products. Below are a few of the technologies available.

**Electronic Products and Relays**
- Electronic timers
- Phase monitors
- Liquid level units
- Thermometer motor

**PlC’s and HMI’s**
- Fully scalable
- Easy wiring
- Simple expansion
- Simple Fieldbus connection
- Programme in all PLC languages

**Data Recorders**
- Circular chart
- Strip chart
- Videographical
- Bar graph

**Cam Switches and Switches**
- DP switch decoder/encoder 16A to 316A
- GS switch fuses 20 to 80A, 60V
- Rotary cam switches:
  - On/Off
  - +5VDC or +24VDC
  - Duty selector
- Service level indicator

**Control Gear**
- Block connectors 40 to 450A
- Mini connectors 4 to 5.5 A
- Manual motor starters 0.1A to 10A

**Final Circuit Protection**
- NCB 63A to 500A
- RCBO 100A to 3200A
- DIN rail mounting: Surge unit
- Up to 65kA rated
- 9/25mA units
- Service level indicator

**Sub Metering and Surge Protection**
- Meters direct and transformer rated
- 32 and 65A options
- DIN rail mounting: Surge unit
- Up to 65kA rated
- 9/25mA units
- Service level indicator

**Din Rail Terminals and PCB Connectors**
- Universal DIN rail mounting
- 0 to 40mm connections
- L, M, neutral, disconnect, fused and power options
- PCB connectors

**Motors**
- 3 Phase
- 2 and 4 pole options
- 0.25 to 75kW ranges
- Foot and flange mounting

**AC Drives**
- Micro drives to 2.6kW
- Standard drives to 22kW
- Full colour HMI
- Chromatic HMI

**Ethernet Switches eCon 2000 & 3000 Series**
The Fast Ethernet switches of the product family HARTING eCon 2000 & 3000 series are suitable for industrial applications and support both Ethernet (10 Mbit/s) and Fast Ethernet (100 Mbit/s). The product family enables the connection of up to 5 eCon 2000 and 10 eCon 3000 network devices (according to type) over shielded Twisted Pair cables and fibre-optic cables (Multi- and Singlemode).

- Auto-crossing
- Auto-negotiation
- Auto-polarity
- Stone and Forward Switching Mode
- Profinet Compatible
- Power Supply terminating method: Triple plugable screw connect
- Dimensions: 23 x 130 x 100.2mm
- Max. cable length 100m

**Ethernet Switches eCon 2000 & 3000 Series**
- Stock no.
  - 386-985 eCon 2000 2003
  - 386-979 eCon 2000 2003
  - 386-961 eCon 2000 2003
  - 386-970 eCon 3000 2003
  - 386-960 eCon 3000 2003

- Series:
  - eCon 2000
  - eCon 3000

- Pno parts
  - 3
  - 4
  - 5
  - 5
  - 5

**LAN Category 5 Industrial Cable**
- **PROFINet® Cat5 Cable**
  - Double shielded, 4 core, 22awg conductors for heavy duty application
  - Other reel sizes available please see our website for more product choice.
  - Operating temperature range: -40°C to +70°C

- **PROFINet® Cat5 Outdoor Cable**
  - Category 5 Cable in accordance with SG/IEC 11801
  - Suitable for use in most industrial Ethernet networks
  - UV protected
  - 4 core
  - Double shielding

**Cat5 RJ Industrial Patch Lead**
- Fully tested and mates with panel feed through connectors.
- Cabling standard in acc. With SG/IEC 11811-1
- IP67
- PVC green sheath
- 6.5mm cable diameter
- Unique Push/Pull connectivity
At RS our main focus has always been to offer value for money and provide our customers with a world-class service. Now, by introducing to you the RS branded range of products, we believe we can save you even more money without compromising on quality.

**PRESSURE GAUGES**
Economical pressure gauges suitable for all gaseous and liquid media that will not obstruct the pressure system or attack copper alloy parts.
- EN837-1/6 1.6 accuracy
- Bourdon tube operating principle
- Calibrated in bar and psi
- Maximum media temperature +65°C

**MINIATURE XENON BEACONS**
Great value IP67 sealed beacons which are ideal for vehicle mounting or general industrial applications where high visibility is important.
- 77mm diameter sealed beacon which is integral
- 15 100Vdc powered
- Secure two bolt mounting
- Operating temperature range: -30°C to +50°C
- AC powered versions also available
- 35mm high

**LINEAR POSITION SENSOR**
Class filled nylon bleded sensor with 19mm electrical stroke and spring loaded plunger.
- Output (smoothness): 0.5% 
- Accuracy: ±2°C & Temperature Coefficient of ±200 ppm/°C
- Mechanical life 5 x 10⁶ (Full Cycle)

**DIGITAL INDICATORS ANALOGUE PROCESS INPUT**
- 4 digit yellow LED display
- Up to 3 adjustable decimal points
- 34 x 77mm fascia (29 x 77mm cut-out)
- Adjustable sampling time
- Configurable units display (e.g. bar)
- Parameter access protection
- Input type: 0-20mA, 4-20mA, 0-1V, 0-10V

**PANEL MOUNT ISOLATORS**
All switch ratings at AC22
- 2 hole rear mount or 35mm DIN rail mount
- RoHS compliant
- Maximum panel thickness 3mm
- Depth behind panel 102 min/117 max mm
- Dimensions: 72(H)x50(W) mm
- Actuator dimensions: 64x64x32mm

**DIgITAL DEFROST THERMOSTATS**
- 4 digit yellow LED display
- 34 x 77mm fascia (29 x 77mm cut-out)
- Dual NTC inputs
- Overlimit control
- Buzzer on probe failure or alarm
- Separate outputs for compressor, defrost and fan
- Additional defrost sensor input

**DOME TOP CABLE GLAND**
Compression type glands supplied complete with locknut and entry thread seal.
- Material: Polyamide 6
- Flammability: UL 94 V2 Low Smoke and Fume
- Complies with EU Directive 2002/95/EC - RoHS
- Complies with EU Directive 2002/96/EC Waste Electrical Equipment WEEE

**NON-RECHARGEABLE ALKALINE BATTERIES**
- Super premium grade batteries
- Designed for general purpose applications
- Higher capacity than zinc-chloride batteries

**BI-METALLIC THERMOSTAT**
- Snap action bi-metallic disc operates an SPST contact which is electrically isolated from the mounting bracket
- All types reset when the temperature falls to nominally 15°C below operating temperature
- Phenolic body with stainless steel end cap
- 1/4in. tab termination
- Contacts are rated to 250Vac 10A with a maximum contact resistance of 50mΩ
- Dielectric strength of 2000Vac
- N/C types open on temperature rise
- N/O types close on temperature rise

At RS, our aim is to save you money but not at the expense of quality.

Our team of specialist engineers test all RS products to meet all manufacturer claims as well as the demands of relevant legislation.
For over 50 years, Crouzet has been providing technical and industrial expertise worldwide to ensure that its products are perfectly adapted for your automation needs.

Always one step ahead of market trends and customer requirements, Crouzet is continually developing its range of both standard and customised products.

Our experienced sales engineers are available to help your design teams find the most reliable and cost effective solutions. As part of CST, headquartered in California, our presence worldwide allows us to be a long-term reliable partner.

### Micro-motors

- A large range of direct drive and geared motors as well as high performance voice coil actuators!

**STILL AVAILABLE:**
- DC and Brushless motors in the range 1 to 200 watts output power
- Full range of gearboxes 0.5 to 40 N.m
- Integrated or external electronics for speed, position and torque control
- Custom actuators

**APPLICATIONS:**
- Medical devices
- Shutter drives
- Access barriers
- Advertising boards
- Pumps
- Automatic doors

### Micro-control

- 3.5” programmable touch panel, 18 new function blocks, new temperature and light probes

**STILL AVAILABLE:**
- User friendly logic controller from 1 to 50 I/Os
- Electronic and electromechanical timers
- Multi-voltage, multi-functions control relays
- Ratemeters, counters, safety relays, power supplies...

**APPLICATIONS:**
- Renewable energies
- Water treatment
- Building management systems
- Conveyors
- Woodworking machines
- Agricultural equipment

### Switches

- An extensive range of Crouzet switches soon available in the RS catalogue!

**STILL AVAILABLE:**
- Full range of snap-action and limit switches
- Signal (low level) and load current (up to 21 amps) switching
- Standard and sealed versions IP67, ATEX
- Hermetically sealed switches

**APPLICATIONS:**
- Valves & actuators
- Electrical protection equipment
- Access control
- Machine tools
- Lifting and handling equipment
- Agricultural machinery

### Pneumatics

- A ready made electro-pneumatic island!

**STILL AVAILABLE:**
- Full range of logic components
- Position detectors, manual control valves
- Pressure and vacuum handling components
- All products available in ATEX

**APPLICATIONS:**
- Medical devices
- Textile machines
- Packaging machines
- Valve actuators
- Heavy equipment
- Equipments in explosive environment

Discover our full product offer at [www.rs-components.com](http://www.rs-components.com)
What is a Hazardous Area?

Dangerous substances are those used or present that could, if not properly controlled, cause harm to people as a result of fire or explosion.

Potentially explosive atmospheres exist where there is a risk of explosion due to mixtures of gases, vapor/air, dusts or other flammable combinations, these include:

- Storage of fuel
- Flammable gases such as acetylene for welding
- Waste dusts in manufacturing processes, such as sanding
- Work that can release naturally occurring gases such as methane in coal mines
- Use of flammable solvents
- Storage of flammable goods such as paint
- Filling, storing and handling of aerosols with flammable propellants
- Manufacturing and distribution of powders such as flour

In such areas it is necessary to eliminate sources of ignition such as sparks, hot surfaces or static electricity which may ignite these mixtures.

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Hazard continuously present (&gt;1000hrs per year)</th>
<th>Hazard present under normal operation (10-1000hrs per year)</th>
<th>Hazard only present infrequently (&lt;10hrs per year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gases</td>
<td>Zone 0</td>
<td>Zone 1</td>
<td>Zone 2</td>
</tr>
<tr>
<td>Dusts</td>
<td>Zone 20</td>
<td>Zone 21</td>
<td>Zone 22</td>
</tr>
</tbody>
</table>

In accordance with ATEX, equipment is marked to indicate the degree of protection it is designed to provide.

### Equipment Marking Explained

- **Ex** = Equipment Marking
- **IIC** = Gas group
- **II2** = Group II Industry
- **EEExd** = Explosion proof electrical equipment
- **T** = Temperature class (see note below)

**T** = Temperature class used for fluorescent lamps

- **I** = Gas group I
- **II** = Gas group II
- **IIB** = Gas group IIB
- **T1** = Temperature class T1: Max surface temperature 450°C
- **T2** = Temperature class T2: Max surface temperature 400°C
- **T3** = Temperature class T3: Max surface temperature 300°C
- **T4** = Temperature class T4: Max surface temperature 200°C
- **T5** = Temperature class T5: Max surface temperature 135°C
- **T6** = Temperature class T6: Max surface temperature 100°C

**Group & Category:**

- **II 2 GD Ex d IIC T6**
- **II 2 GD Ex d IICT6**
- **II 2 GD Ex d IIC T6**
- **II 2 GD Ex d IIC T4**
- **II 2 GD Ex d IIC T6**

**Pressure Calibrator: DPI 610/7**

- **DPI 610 I/S 20-bar**
- **DPI 610 I/S 7-bar**
- **DPI 610 I/S 20-bar**

**Pressure and Current Displayed Simultaneously**

- **Pressure range accuracy:** ±0.025% FS
- **Ambient temperature recording modes**
- **Portable device, self-powered, battery operated medium pressure range 0.07 to 250 bar**
- **Calibration accuracy:** ±0.025% FS
- **Pressure and current displayed simultaneously**

**LED EX SIGNAL TOWER 36MM**

- **Group & Category:** II 2GD Ex d IIC T6
- **Certificate no:** L.C.L.E-97 ATEX602

**PUSHBUTTON CONTROL STATIONS**

- **Emergency Stop**
- **Lockable Emergency Stop**
- **One pushbutton, one emergency stop button and one multi-voltage, green LED**

**Certificate no:** PTB No. Ex-97.3127

**Barsterc**

- **Emergency stop**
- **Lockable emergency stop**

**Certificate no:** PTB No. Ex-97.3127

**Group & Category:** II 2GD Ex d IIC T6

---

*www.rs-components.com*
Moeller for your machine

Moeller offers a wide range of automation products and with over 2,800 lines available you are sure to find the solution you need.

LOGIC CONTROL
Easy Relay, easy MFD and easy Control are based on a single concept – simple operation. The easy range provides solutions for a wide range of applications from basic to powerful controller tasks.

INVERTER CONTROL
Inverters and soft start’s to efficiently and precisely control your motor applications to help you reduce energy consumption.

MOTOR CONTROL
A full range of control gear from contactors and overloads to complete motor starter solutions and supported by a comprehensive range of cam switches, isolators and limit switches.

OPERATOR CONTROL
Pushbuttons and indicators are a vital link in any automation system and the RMQ Titan family from Moeller are ergonomic, resilient and attractive, so ideal to complete any machine.

Keeping your business under control with 294 automation brands from one supplier:

For further details of the entire Moeller range, including datasheets visit www.rs-components.com
MAINTENANCE ACCESSORIES

PVC ELECTRICAL INSULATION TAPE
Ideal for most electrical insulation work and colour coding. Manufactured to BS EN 60454 / Type 2 specification
- Flame retardant
- VDE compliant
- Water and UV resistant
- Non corrosive adhesive
- L 33mm x W 19mm

<table>
<thead>
<tr>
<th>Stock no.</th>
<th>Colour</th>
<th>Pack size</th>
<th>Roll size</th>
</tr>
</thead>
<tbody>
<tr>
<td>561-827</td>
<td>Red</td>
<td>50 x 12mm</td>
<td>33m x 9mm</td>
</tr>
<tr>
<td>230-598</td>
<td>Black</td>
<td>50 x 12mm</td>
<td>33m x 9mm</td>
</tr>
<tr>
<td>205-9997</td>
<td>Combination</td>
<td>30 x 12mm</td>
<td>33m x 9mm</td>
</tr>
</tbody>
</table>

PRO TOUCH RETRACTABLE KNIFE
- Aluminium Body
- Ergonomic Design
- Magnetic Blade Holder
- Quick and easy access to spare blades
- Supplied with 6 Bi-metal blades

<table>
<thead>
<tr>
<th>Stock no.</th>
<th>Blade Colour</th>
<th>Blade Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>494-382</td>
<td>Red</td>
<td>227mm</td>
</tr>
<tr>
<td>494-383</td>
<td>Yellow</td>
<td>227mm</td>
</tr>
<tr>
<td>494-384</td>
<td>Black</td>
<td>227mm</td>
</tr>
</tbody>
</table>

PACKET SCREWDRIVER
- 2-pocket screwdrivers with chrome-vanadium steel blades and cellulose acetate handles
- Handles incorporate a pocket clip
- Sizes 3 x 50mm parallel & 6 x 50mm

<table>
<thead>
<tr>
<th>Stock no.</th>
<th>Colour</th>
<th>Blade Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>494-385</td>
<td>Red</td>
<td>5.0mm x 150mm</td>
</tr>
<tr>
<td>494-386</td>
<td>Yellow</td>
<td>5.0mm x 150mm</td>
</tr>
<tr>
<td>494-387</td>
<td>Black</td>
<td>5.0mm x 150mm</td>
</tr>
</tbody>
</table>

CABLE TIE BUNDLE
Save money by buying the cable tie bundle and get a free remote control Hummer. Cable Tie bundle contains the following RS stock numbers:
- 170-3873 = 100 x black nylon 150mm x 3.5mm ties
- 170-3002 = 100 x black nylon 200mm x 4.6mm ties
- 170-3004 = 100 x black nylon 200mm x 4.6mm ties
- 479-4365 = 100 x black nylon 270mm x 4.8mm ties
- 396-2181 = 100 x black, easy to release 200mm x 4.8mm ties
- 561-527 = 100 x black nylon 385mm x 4.6mm ties

Limited stock available.
Free remote control car is only available when you buy the cable tie bundle stock number below:

<table>
<thead>
<tr>
<th>Stock no.</th>
<th>Colour</th>
<th>Blade Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>170-3924</td>
<td>Black</td>
<td>385mm x 4.6mm</td>
</tr>
<tr>
<td>170-3902</td>
<td>Black</td>
<td>200mm x 4.6mm</td>
</tr>
<tr>
<td>170-3873</td>
<td>Black</td>
<td>150mm x 3.5mm</td>
</tr>
</tbody>
</table>

SWITCH KEY UNIVERSAL WRENCH
- A multi-purpose enclosure key wrench designed for use in maintenance & service applications
- The four arms of the tool offer five differing drive possibilities: 6.5mm (1/4 in), 8.1mm (5/32 in), 9.8mm (5/16 in) square sockets, 6.4mm (1/4 in) AF hex socket, 9.8mm triangular socket and 9mm winged key drive
- Available with either a bright chrome or zinc plated finish

<table>
<thead>
<tr>
<th>Stock no.</th>
<th>Colour</th>
<th>Blade Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>439-3077</td>
<td>Chrome</td>
<td>8.1mm x 50mm</td>
</tr>
<tr>
<td>439-3052</td>
<td>Zinc</td>
<td>8.1mm x 50mm</td>
</tr>
</tbody>
</table>

STANLEY SM POWERLOCK TAPE MEASURE
- Automatic power blade return
- Removable belt clip
- Blade is coated with a polyester film for maximum wear resistance
- 5m/16ft length

<table>
<thead>
<tr>
<th>Stock no.</th>
<th>Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>576-087</td>
<td>Black</td>
</tr>
</tbody>
</table>

STANLEY 5M POWERLOCK TAPE MEASURE
- Automatic power blade return
- Removable belt clip
- Blade is coated with a polyester film for maximum wear resistance
- 5m/16ft length

<table>
<thead>
<tr>
<th>Stock no.</th>
<th>Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>576-087</td>
<td>Black</td>
</tr>
</tbody>
</table>

TOOL BAG/ORGANISER
- Polyester
- Heavy duty zips and clips
- Wired mouth to keep the bag open
- Padded shoulder strap
- External 6 pockets including one for mobile phone
- Internal -12 pockets
- Large water resistant zip pocket for documents and spirit level straps
- Weight 1.6kg
- L 431mm; W 254mm; H 254mm

<table>
<thead>
<tr>
<th>Stock no.</th>
<th>Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>104-282</td>
<td>Green/Yellow</td>
</tr>
<tr>
<td>104-286</td>
<td>Red/Brown</td>
</tr>
<tr>
<td>104-288</td>
<td>Grey/Blue</td>
</tr>
</tbody>
</table>

LANE MARKING TAPES
- PVC tape for marking floors
- Abrasion resistant
- Water and UV resistant
- Non corrosive adhesive
- Flame retardant to UL510 spec
- Individual free standing or wall mounted

<table>
<thead>
<tr>
<th>Stock no.</th>
<th>Colour</th>
<th>Width x Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>711-930</td>
<td>White</td>
<td>35x50x135mm</td>
</tr>
<tr>
<td>711-968</td>
<td>Yellow</td>
<td>35x50x135mm</td>
</tr>
<tr>
<td>711-980</td>
<td>Red/White</td>
<td>35x50x135mm</td>
</tr>
<tr>
<td>711-974</td>
<td>Black/Yellow</td>
<td>35x50x135mm</td>
</tr>
</tbody>
</table>

STANLEY 5M POWERLOCK TAPE MEASURE
- Automatic power blade return
- Removable belt clip
- Blade is coated with a polyester film for maximum wear resistance
- 5m/16ft length

<table>
<thead>
<tr>
<th>Stock no.</th>
<th>Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>576-087</td>
<td>Black</td>
</tr>
</tbody>
</table>

SERVICE ENGINEERS TOOLKIT
Includes continuity checker, screwdriver, allen keys, soldering iron, files, tape measure, cutters and pliers, plus more.
- Strong, black ABS moulded case
- Document holder
- Locking catches with key supplied

<table>
<thead>
<tr>
<th>Stock no.</th>
<th>Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>541-365</td>
<td>Black</td>
</tr>
</tbody>
</table>

EMERGENCY TWINSPOT LUMINAIRE
- Optional - Switch for testing emergency mode
- Battery cut-off prevents deep discharge
- LED indication of battery charge status
- Alarm output contacts (0·1A max.)
- 2 x 6V 12Ah batteries required
- Weight 4.0kg
- L 250mm; W 250mm; H 150mm

<table>
<thead>
<tr>
<th>Stock no.</th>
<th>Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>494-7880</td>
<td>Black</td>
</tr>
</tbody>
</table>

FREE REMOTE CONTROL CAR
Free remote control car is only available when you buy the cable tie bundle. Limited stock available.

The RS website has instant access to over 200,000 products and datasheets, and tells you if the product you require is in or out of stock.
PSR SAFETY SWITCHING DEVICES

**SIMPLICITY IN SAFETY**

When it comes to safety technology, switching devices must be easy to use and safe – this is the basis for the PSR series from Phoenix Contact. A combination of innovative connection technology, compact, space-saving design and clear layout offers fast and simple implementation of your safety applications. Certified safety offers the highest standard of quality and reliability. PSR safety switching devices are developed and certified in accordance with the latest functional safety requirements for control systems in machines and systems.

**PSR TRISAFE - ONE SWITCHING DEVICE FOR ALL SAFETY FUNCTIONS**

With PSR-TRISAFE you can implement all safety functions in a machine or system with just one switching device. PSR-TRISAFE offers up to 8 switching/message thresholds and 4 I/Os.

- *Multiple functions* in a compact 67.5 mm format
- *4 safe outputs* (DO)
- *20 safe inputs* (DI)
- *Additional clock, monitoring and ground switching output* (optional)
- *Diagnostics capability*

**MINI POWER**

For Measurement and Control Technology.

- Stock no. | Output current | Phases
- 665-7935 | 2.5A | 1AC
- 665-7908 | 16A | 1AC
- 665-7873 | 40A | 1 + 3AC
- 665-7867 | 10A | 1 + 3AC

**TRIO POWER**

Basic functionality at the highest level.

- All of these stock numbers are 24Vdc output voltage

**STEP POWER**

Specially designed for building automation.

- 665-7917 | IAC 12DC 5A
- 665-7913 | IAC 12DC 10A
- 665-7910 | IAC 24DC 7.5A
- 665-7907 | IAC 24DC 10W

**OUR APPLICATION-ORIENTED PRODUCT RANGE OFFERS INNOVATIVE CONNECTION SOLUTIONS WITH IP20 AND IP67 PROTECTION FOR...**

**Signals**

In measuring and control technology.

**Data**

Seamless for all established fieldbuses, Ethernet, Profinet, FireWire, and USB.

**Power**

For drive technology and all areas of modern power electronics.

For additional information visit www.rs-components.com

---

**CONTACTRON SOLID-STATE CONTACTORS AND MOTOR MANAGEMENT**

CONTACTRON solid-state contactors from Phoenix Contact are the durable and cost-saving alternative to mechanical contactor technology. CONTACTRON power electronics are used everywhere where frequent, reliable and space-saving switching is demanded. The CONTACTRON motor manager with real power monitoring detects under- and overloads and protects motors and the valuable system mechanics. Motor managers and solid-state contactors can be ideally combined to form fast, cost-saving and durable motor controls.

**CONTACTRON MOTOR MANAGER AND PROFIBUS Gateway**

- **Protection for motor and system**
- **Monitoring of current, voltage and power, operation hours, energy etc.**
- **8 switching/message thresholds and 4 I/Os**
- **One PROFIBUS-Gateway connects up to 32 EMM devices**
- **Internal max. 16A or external current converter versions available**

**CONTACTRON SOLID-STATE CONTACTORS**

- **Long-life, wear-free, fast and safe switching times, rugged design**
- **4 in 1 versions** with left running, right running, emergency stop and motor protection function
- **2 and 3-phase variants with or without reversing function and 24VDC or 230VAC input**
- **Designed to switch motors or high loads up to 13.5kW**

**PSR SAFETY RELAYS**

PSR safety relays offer an optimal solution for every safety application – one device for each safety function.

- *Routinely used contacts in accordance with EN 50525*
- *Compact design from just 17.5mm*
- *Convenient connection technology*
- *Enclosed plug connectors*

- 665-7902 | PSR-ER4 | 2 NO, 1 NC, SIL3
- 665-7908 | PSR-ER10M | 2 NO, 1 NC, SIL3
- 665-7904 | PSR-ER4A | 2 NO, 1 NC, SIL3
- 665-7908 | PSR-ER04 | 2 NO, 1 NC, SIL3
- 665-7956 | PSR-ERD | 4 NO, SIL3
- 665-7950 | PSR-ETH4 | 2 NO, 1 NC, SIL3
- 665-7909 | PSR-ER04 | 2 NO, 1 NC, SIL3

---

Please note at times of going to press products were not live on our website due to being new in the market. Please contact your local RS distributor for any information on these products.

---

Please note at times of going to press products were not live on our website due to being new in the market. Please contact your local RS distributor for any information on these products.