



# Preventative Maintenance

You can rely on us to keep your  
production line moving.



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## Maintenance, while avoiding unplanned downtime, is a challenge for all manufacturing businesses.

**According to Industry Week, “Unplanned downtime costs industrial manufacturers an estimated \$50 billion annually.” And equipment failure is the cause of 42% of this unplanned downtime.**

In this guide we highlight areas of our offer that could help you keep your production line running and reduce unplanned downtime. On page 16 we hear from an engineering manager who believes that supplier collaboration is vital for effective maintenance management. And on pages 25-28 we've got a selection of great offers on some maintenance essentials we wouldn't want you to miss!

Preventive maintenance offers many important benefits, but the most important one is that it can improve your bottom line. We partner with you to help integrate new products, services and technologies to support your preventative maintenance demands, as well as procurement needs.

### Join the conversations



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Service from our friendly customer service team **0800 888 780**

### Safety Rated Limit Switches

- Limit switches and interlocks with safety rated snap action contacts
- Housed in a robust glass fibre reinforced plastic body with M20 threaded gland entry
- IP67 sealed and UL/CSA/CE certified



- 179-7568** Pin Plunger
- 179-7567** Roller Plunger
- 179-7569** Adjustable Roller Lever

### Schaffner FN3287 Series Power Line Filters

- Standard and high performance EMC solution
- Footprint space-saving book-style housing
- Solid safety connector blocks



|||SCHÄFFNER

- 184-7568** 16A 530/305 V ac 60Hz - Box of 8 FN3287-16-44-C33-R65
- 184-7569** 20A 530/305 V ac 60Hz - Box of 8 FN3287-20-33-C33-R65
- 184-7570** 25A 530/305 V ac 60Hz - Box of 8 FN3287-25-33-C33-R65
- 184-7571** 40A 530/305 V ac 60Hz - Box of 7 FN3287-40-33-C33-R65

### Heat Shrinkable Tubing 2:1

- Flexible, high performance elastomeric tubing
- Resistant to diesel, aviation and hydraulic fluids
- Used in aerospace, defence, railway and automotive applications
- VG approved shrink tubing



HellermannTyton

- 187-1426** 30 Mtr 342-23810
- 187-1423** 25 Mtr 342-10050
- 187-1424** 50 Mtr 342-22540

### Phase Monitoring Relays

- RM22 Zelio multi-function control relays monitor supply voltages and warn of condition changes
- Each relay offers threshold adjustment, LED status indication and on-delay or off-delay relay output
- Relay output 2 C/O 8A rated



- 179-9433** 208-480Vac 3 Phase failure & Sequence RM22TG20
- 179-9434** 380-480Vac 3 Phase failure, Sequence, Undervoltage RM22TU23
- 179-9435** 15-500Vac/dc Overvoltage RM22UA23MR

### Leafield™ active leakage current filter

- High leakage current compensation
- Optimization of the RCD(1) compatibility
- Easy to install
- No external power supply needed



- 185-3880** 50A 1mOhm EMC 305/530V B84233A1500R000

### Safe-D Fire-Rated Cable Clips

- Fire-rated flexible cable clips supplied in flat form, and can be quickly folded to make a variety of shapes to most effectively secure cable installations
- Fits direct to surface, or in PVC trunkings
- Thumb friendly, easy fold side-tabs with rounded edges for easy handling

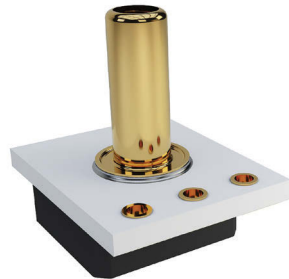


- 182-3854** 30 Flat 56mm x 20mm Pack of 100
- 182-3855** 40 Flat 110.5mm x 20mm Pack of 50
- 182-3856** 50 Flat 165mm x 20mm Pack of 50
- 182-3865** Fire Rated Screws - Pack of 100



### BPS130 Series - 10 mm Analog High Pressure Sensors

- Compensated analogue output
- Absolute and gauge options
- Superior performance in high temperature/ harsh media sensing applications
- Compensated plug and play reduces development time



**BOURNS®**

<b>183-7219</b>	300psi 300psi 3-Pin	BPS130-HG300P-3S
<b>183-7222</b>	300psi 300psi	BPS130-HA300P-1SG
<b>183-7242</b>	15psi 15psi	BPS130-HA015P-1MG
<b>183-7245</b>	15psi 15psi	BPS130-HA015P-1SG

### TG40 Series 4:1, Heat Shrink & Cold Shrink Sleeve

- Highly flexible
- No breakdown
- Operating temperature ranges between -55°C and 125°C



**HellermannTyton**

<b>181-6791</b>	6mm x 50mm - Bag of 100	317-00034
<b>181-6792</b>	8mm x 50mm - Bag of 100	317-00035
<b>181-6793</b>	12mm x 65mm - Bag of 100	317-00036
<b>181-6794</b>	6mm x 50mm - Bag of 100	317-00037

### Alpha Wire 2 Conductor Tinned Copper Braid Industrial Cable

- 2 conductor and 1mm<sup>2</sup> conductor size
- Stranded bare copper conductors with transparent jacket
- Rated up to 1M flex cycles



**AlphaWire**  
Cables you trust. Service you deserve.

<b>181-1673</b>	1 mm <sup>2</sup> Transparent PVC Sheath, 100m Reel	470021CY CL033
<b>181-1674</b>	1 mm <sup>2</sup> Transparent PVC Sheath, 50m Reel	470021CY CL321
<b>181-1678</b>	1 mm <sup>2</sup> Grey PVC Sheath, 50m Reel	470021YY GE321

### Black Anti-Slip Tape

- Anti-slip Water and UV Resistant Durable



**ADVANCE**

<b>176-6040</b>	18m x 50mm	AT2000 Black
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### RS PRO Precision Cleaner & Degreaser

- Special blend of solvents for cleaning critical electro-mechanical components
- Ideal for rapid cleansing of electric motors and all types of electro-mechanical equipment where the use of water-based chemicals is inadvisable
- Non-conductive, therefore safe to use on electrical equipment



**RS PRO**

<b>180-831</b>	500ml
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### RS PRO Water Pump Pliers

- Constructed from high grade steel with mirror polish and slip guard
- Two component handle for ease of use
- VDE tested and confirms to IEC 900 1000 V



**RS PRO**

<b>161-041</b>	Vde Waterpump Plier, Box Joint 240mm
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Visit [nz.rs-online.com](http://nz.rs-online.com) to order today!

### Wall Mounted First Aid & Eyewash Kit

- Essential first aid point featuring a fully stocked 1 - 10 person HSE compliant first aid kit and emergency eyewash kit with bottle retainer for total stability
- Eyewash kit contains sterile eyewash and sterile dressing for treating wounds



**168-131** 1-10 Persons

### RS Diagonal Cable Cutter

- Manufactured from high grade polished steel
- PVC-dipped handles with a soft grip, in red
- Induction hardened



**161-271** Elec. Diag. Cutter Point.W/O Bevel 115mm

### FLIR E8 WiFi Infrared Camera with MSX® & Wi-Fi

- Simple, intuitive controls
- Automatic and focus-free, with clear on-screen navigation to measurement tools and settings
- Share images and findings easily



**184-6124** 76,800 (320 x 240) pixels E8xt (Incl Wi-Fi)

### Particle Matter Sensor

- The evaluation kit SEK-SPS30 is designed for a quick, easy and cost-efficient evaluation of Sensirion's SPS30 Particulate Matter sensor.



**186-2299** Evaluation Kit SEK-SPS30

### RS PRO ESD Steel Flat Nose Pliers

- ESD Protected for conducting away static electricity
- All pliers are of box joint design
- Manufactured from high grade steel



**161-063** Esd Flat Nose Plier 120mm

### Multimode Fibre Optic Cable

- Deliver fast, reliable, data transfers, safely over high end networking equipment



<b>186-1646</b> 2m	450FBLCLC2
<b>186-1633</b> 1m	50FIBLCLC1
<b>186-1639</b> 2m	FIBLCST2

**Schneider Electric Acti 9 iC60H MCB Mini Circuit Breaker**

- Acti9 iPB pushbuttons are used to control electric circuits by means of pulses, available in three different options: single, double or single + indicator light



<b>790-9181</b>	Acti9 ipb 1No-1Nc Grey Button	A9E18033
<b>791-3168</b>	Acti9 iC60H MCB 1 Pole 20A Curve B	A9F53120
<b>791-3300</b>	Acti9 iC60H MCB 1 Pole 25A Curve C	A9F54125

**Male IEC Filter**

- Meets IEC 950 and overvoltage II category of IEC 664
- 250 Faston terminals



<b>386-4188</b>	iec950 Inlet Filter, 6A	3864188
<b>386-4217</b>	iec950 Single Fused Inlet Filter, 6A	3864217
<b>386-4201</b>	iec950 Single Fused Inlet Filter, 4A	3864201

**PIANO Series DIN Rail PSU**

- Compact and reliable with MTBF of more than 1.4 million hours
- LED indication and 'DC OK' output
- DC output adjustable 24-28Vdc



<b>123-8020</b>	24Vdc, 5A, 120W, 200 → 240Vac	PIC120.242C
<b>123-8022</b>	24Vdc, 10A, 240W, 200 → 240Vac	PIC240.241C

**Pushbutton Control Stations**

- M22 series NO/NC 22mm push buttons pre-fitted
- IP65 sealed 56mm x 120mm x 80mm enclosure
- Temperature range -25° to +70°C



<b>511-4996</b>	Up/down	78640752
<b>399-4021</b>	Red 0 /Green 1	216529

**24Vdc DIN Rail Power Supplies**

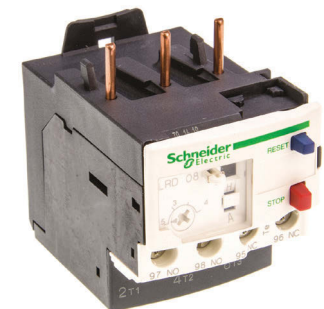
- Great value universal input range (90Vac to 264Vac) DIN rail PSUs
- 24Vdc output with LED status indication - ideal for control panels or other automation applications
- Over voltage and Over current protection
- Standards Met: CB, CE, CUL, CULus Recognised, FCC, UL



<b>136-8303</b>	15W 24Vdc 650mA
<b>136-8315</b>	70W 24Vdc 3A
<b>136-8319</b>	120W 24Vdc 5A

**TESYS D Thermal Overloads**

- Combine with TeSys D contactors to create a complete motor control & protection solution
- Full range from 1A to 65A available online, just search 'LRD'



<b>394-9380</b>	LRD08 - Overload relay, 2.5-4A FLC range	LRD08
<b>394-9374</b>	LRD10 - Overload relay, 4-6A FLC range	LRD10
<b>394-9368</b>	LRD12 - Overload relay, 5.5-8A FLC range	LRD12
<b>394-9352</b>	LRD14 - Overload relay, 7-10A FLC range	LRD14

**ABB R600 Series 24V ac/dc DIN Rail Interface Relay Module**

- Screw or spring type terminals Wide range of output options
- Built in RC circuit
- Leakage current protection on the input side



<b>670-0002</b> Interface Relay W/ Low Level 24V 6A	1SNA645005R0700
<b>669-9980</b> Interface Relay 24V 6A	1SNA645001R0300

**Metal Cased EN50047 Limit Switches**

- GLC series die cast metal cased limit switches with IP66 protection
- 1NO + 1NC (SPDT) snap action actions rated at 10A resistive (3A AC-15)
- PG 13.5 gland entry



<b>308-1793</b> Pin Plunger	GLCB01B-RS
<b>308-1816</b> Roller Plunger	GLCB01C-RS
<b>308-1822</b> Fixed Side Roller Lever	GLCB01A1A-RS
<b>308-1664</b> Adjustable Side Roller Lever	GLCB01A2A-RS
<b>308-1850</b> Fixed Top Roller Lever	GLCB01D-RS
<b>308-1670</b> Large Side Rotary Lever	GLCB01A9A-RS
<b>308-1838</b> Coil Spring Actuator	GLCB01E7B-RS
<b>308-1844</b> Adjustable Side Rotary Rod Lever	GLCB01A4J-RS

**Sick Photoelectric Sensors**

- IP67 ABS housing
- Immune to HF lights, flashing alarm lights, etc.
- Visible red light source
- Supply voltage: 10-30Vdc



<b>530-0989</b> Pre-Wired Retro Sensor, PNP	1028152
<b>321-5261</b> Dif.Pre-Wired Switch, NPN	6011039

**Siemens Multi Function Contactor & Timer Relays**


<b>746-0730</b> Contactor Relay, 2No+2Nc, 110Vac, Sz S00	3RH2122-1AF00
<b>122-9409</b> Coupling Contactor Relay 2No+2Nc 24V S00	3RH2122-1JB40
<b>831-6035</b> Time Relay On-Delay 2X Co, Screw	3RP2525-1BW30
<b>834-7502</b> Time Relay Multifunction	3RP1574-2NP30

**SSF67PM12 Series Level Float Switches**

- Single or dual switching levels
- M16 mounting thread



<b>780-0248</b> 50/150mm NO/NO, M12 connect	SSF67A50A150PM12
<b>780-0245</b> 50/100mm NO/NO, M12 connect	SSF67A50A100PM12
<b>780-0239</b> 25/225mm NO/NC, M12 connect	SSF67A25B225PM12
<b>756-4217</b> 50/250mm, NC/NC	SSF67B50B250
<b>756-4141</b> ½ NPT, M12 connect	SSF215XPM12

**50x50mm Photoelectric Sensors**

- Compact 50x50mm body with 2m pre-cabled connection
- LED alignment and output indicators - 24-240VAC/DC supply
- Mounting bracket available (512-4606)



<b>512-4662</b> 1m, Diffuse Photoelectric, Relay O/P, pre-wired	XUK5ARCNL2
<b>512-4656</b> 5m, Retro-Reflective, Relay O/P, pre-wired	XUK9ARCNL2
<b>512-4640</b> 7m, Retro-Reflective, Relay O/P, pre-wired	XUK1ARCNL2



## QC Series Connector Seal

- Constructed from Ultem® impact, temperature and corrosion resistant composite material, ideal for use with over-moulding and heat shrink tube
- Positive thumb latch receptacle has pin contacts and the plug socket contacts
- 2, 7 and 12 way scoop proof plan forms



**613-1188** Compression Screw Gland Nitrile

QC210N-L

## Insulated Crimp Ring Terminals

- Copper body material for high conductivity and easy crimping
- Tin plating for resistance to corrosion, added strength and excellent conductivity
- Vinyl insulation for electrical insulation and terminal protection
- Colour coded insulation for easy identification wire size
- Expanded insulation entry for easy wire insertion
- Maximum operating temperature of 150°C
- Price per bag of 100



**613-9249** Red M4 0.5-1.5mm<sup>2</sup> - Pack of 100

**613-9255** Red M6 0.5-1.5mm<sup>2</sup> - Pack of 100

**613-9261** Red M5 0.5-1.5mm<sup>2</sup> - Pack of 100

**613-9299** Red M8 0.5-1.5mm<sup>2</sup> - Pack of 100

**613-9508** Blue M4 1.5-2.5mm<sup>2</sup> - Pack of 100

**613-9312** Blue M5 1.5-2.5mm<sup>2</sup> - Pack of 100

**613-9328** Blue M6 1.5-2.5mm<sup>2</sup> - Pack of 100

**613-9362** Blue M8 1.5-2.5mm<sup>2</sup> - Pack of 100

**613-9378** Yellow M4 4-6mm<sup>2</sup> - Pack of 100

**613-9659** Yellow M5 4-6mm<sup>2</sup> - Pack of 100

**613-9413** Yellow M6 4-6mm<sup>2</sup> - Pack of 100

**613-9283** Yellow M8 4-6mm<sup>2</sup> - Pack of 100

## Ratcheting Crimp Tool

- Non-slip main handle and low friction moving handle ensure a comfortable hand grip left or right handed
- Provides two-hand grip in the final phase of crimping, increasing comfort and productivity
- Full cycle crimp mechanism to ensure consistent, reliable crimp
- Precision eccentric adjustment for consistent performance
- Durable: life span exceeds 50,000 cycles
- High strength, with hardened alloy Swedish steel construction



**533-279** For 6.00mm<sup>2</sup> to 0.75mm<sup>2</sup> / AWG22 to AWG10

## Wago 221 Series Compact Splicing Connectors

- Tool-free lever-operated connectors allow solid, stranded and fine-stranded wires to be connected faster, more reliably, while minimizing the amount of space in junction boxes
- Transparent housing shows that the wire is inserted properly and stripped to the correct length
- Easy termination via low operating force
- Any combination of wire types and sizes from 0.14 to 4mm<sup>2</sup> (24-12 AWG) is possible
- Two test ports for all standard test probes
- Price for a pack of 10



**883-7544** 2 Way/Pole - Pack of 10

6026-3732

**883-7548** 3 Way/Pole - Pack of 10

6026-3730

**883-7557** 5 Way/Pole - Pack of 10

6026-3734

## DIN 43-650-A Solenoid Valve Connectors

- Cable socket with central screw (M3 x 35mm)
- 3 pole plus earth
- 16A rating
- Choice of gland
- Extensive range online



**156-4741** PG9 gland

931969100

**156-4757** PG11 gland

931952100

## Bulgin Standard Buccaneer Series IP68 Panel Mount Connectors

- IP68
- UL94HB Housing
- Insulation Resistance of >10<sup>4</sup> MΩ @ 500 V dc
- Positive locking keyways
- Front Panel Mounting



**293-5829** 4 Way Jam Nut Chassis Plug, 6A

PX0747/P

**293-5841** 4 Way Jam Nut Chassis Socket, 6A

PX0747/S

**293-5857** 4 Way Screw Terminal Cable Plug, 6A

PX0748/P



### Han HPR Series Connector Hood

- Top Entry Hood
- IP68

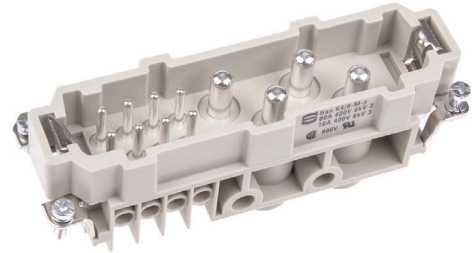


**426-0723** Size 6B M25 Thread

19400060411

### Han K Series Connector Inserts

- Current rating: 16A, 80A
- Poles 8//24 format has crimp connection



**172-8428** Male Insert

09380122601

**172-8484** Female Insert

09380062701

### Harting DIN Rail Mount Ethernet Switches

- Fast Ethernet Non-Blocking switch architecture
- RJ45 connectors
- Wide range power supply 24/48 V dc



**812-8872** RJ45 8 Port

24030080010

**912-5335** Unmanaged Switch 16 X RJ45

24030160010

### Harting Crimping Tool

- Basic hand crimping tool frame for BC/FC contacts



**740-6663** 30AWG

9990000620

### Harting Yellow Cat6 Cable

- Operating temperature range -10°C to +70°C
- PVC sheath
- Flame retardant
- Lead free



**498-3000** Cat6, 4 Pair Of 2 x AWG26 - 100 mtr

9456000502

### Han A Series size 16 A Panel Mount Connector Insert

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

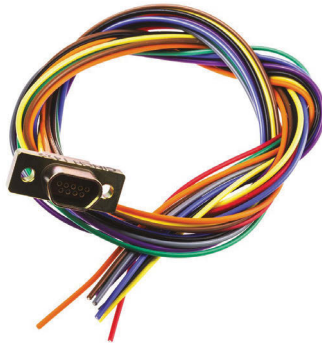


**181-0915** 16P+E Pin Insert, 16A

9200162612

## RS PRO Panel Mount D-sub Connector Socket

- Durable and rugged design
- Reliable with a high performance
- Lightweight with a compact space-saving high-density design



**452-990** 9 Way Metal Shell Micro D Socket, 3A

## Brady Heat Shrink Cable Sleeve Cable Marker Labels

- Heat-shrinkable
- Self-extinguishing
- Meets MIL-M-81531, MIL-STD-202F, Method 215 & UL 224



<b>694-9125</b>	3.18mm x 2.13m	110923
<b>694-9128</b>	4.75mm x 2.13m	110924
<b>694-9122</b>	6.35mm x 2.13m	110925
<b>694-9131</b>	9.53mm x 2.13m	110926

## TE Connectivity Black Harsh Environment Wire

- Halogen free, low smoke generation
- Highly flame retardant
- Flexible, easy to install
- Small size, lightweight



<b>244-1251</b>	0.50Sq.mm - 100m	100G0111-0.50-0(100)
<b>244-1267</b>	0.75Sq.mm - 100m	100G0111-0.75-0(100)
<b>244-1273</b>	1.00Sq.mm - 100m	100G0111-1.00-0(100)

## Lapp Mains Power Cable, Black Rubber Sheath

- High stresses
- For protected and fixed installation permitted up to 1000V
- Flame Retardant to IEC 60332-1-2
- Oil-resistant according to EN 60811-404



<b>817-9022</b>	4 Core 2.5mm Rubber Cable - 50m	16001053
<b>817-9034</b>	4 Core 4mm Rubber Cable - 50m	16001063
<b>817-9006</b>	3 Core 2.5mm Rubber Cable - 50m	1600118
<b>817-9000</b>	3 Core 2.5mm Rubber Cable - 100m	1600118

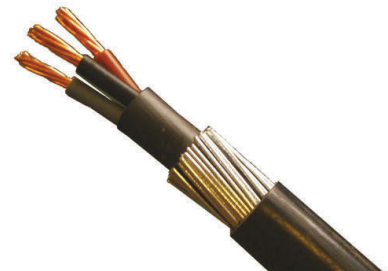
## Lapp Olflex Classic 110 YY Control Cable

- Fine copper wire strands
- Conductors insulated with special PVC, black with white numbers + green/yellow earth wire
- Special PVC external sleeve, silver-grey RAL 7001, flame retardant
- Generally resistant to some oils and chemical products at room temperature



## 3 Core Armoured Arctic Cable

- BASEC Approved (BS5467)
- Stranded annealed copper to BS EN 60228
- Black PVC bedding to BS EN 60811-1-1 extruded over insulated cores



<b>777-0539</b>	3 Core 1.5mm Swa Cable - 100m
<b>776-1963</b>	Yellow 0.75mm - 100m
<b>776-1967</b>	Blue 0.75mm - 100m
<b>776-1976</b>	Yellow 1.5mm - 100m
<b>776-1979</b>	Orange 1.5mm - 100m



<b>141-148</b>	7G1.0mm - 50m	1119207
<b>141-160</b>	12G1.0mm - 50m	1119212

Visit [nz.rs-online.com](http://nz.rs-online.com) to order today!

## Defence Standard 61-12 Screened Multicore Cable

- Defence Standard 61-12, Parts 4 and 5
- 7/0.2mm core strands
- Other core options available on the RS web site
- Supplied on 100m reels



**660-0439** 4 Core - 100m  
**660-0445** 6 Core - 100m

## Expandable Sleeving Tool

- Interchangeable prong tool for sleeves of diameter from 1.2mm up to 11.5mm
- Supplied with three sets of prongs and an assembly aid



**HellermannTyton**  
**548-259**

90110489

## Ecowire™ UL11028 Equipment Wire

- Fully recyclable
- Up to 45% smaller diameter than PVC and up to 40% lighter than other insulation materials
- Examples shown are 20AWG, 0.52mm<sup>2</sup> CSA
- Other reel sizes and AWGs available



**687-7493** White - 30M 6714 WH005  
**687-7496** Black - 30M 6714 BK005  
**687-7499** Red - 30M 6714 RD005

## Skintop IP68/69 Brass Cable Glands

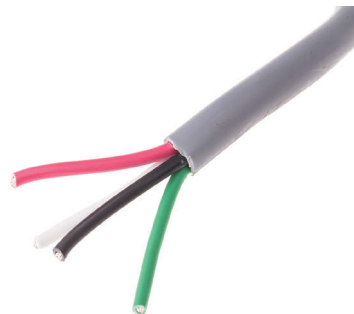
- Nickel plated brass, with innovative double lamella insert for easier assembling of cables with larger diameters
- Supplied with locknut
- Price each shown, supplied in a pack of 5



**405-8817** M12 - Pack of 5 52103000+53112000  
**405-8823** M16 - Pack of 5 53112010 + 52103010  
**405-8839** M20 - Pack of 5 53112020 + 52103020  
**405-8845** M25 - Pack of 5 53112030 + 52103030

## LSZH Multicore Industrial Cables

- LSZH materials for low-smoke properties and reduced toxicity
- Tinned copper conductors resist corrosion
- Stranded conductors for installation flexibility
- Unshielded versions offer smallest diameter
- Color-coded conductor insulation for easy identification
- Supplied in a reel of 30m length



**673-3264** 4 core 20 AWG (0.56mm<sup>2</sup>) - 30m 1896/4L SL005  
**673-3245** 5 core 22 AWG (0.35mm<sup>2</sup>) - 30m 1175L SL005  
**673-3248** 6 core 22 AWG (0.35mm<sup>2</sup>) - 30m 1176L SL005  
**673-3242** 7 core 22 AWG (0.35mm<sup>2</sup>) - 30m 1177L SL005  
**673-3251** 8 core 22 AWG (0.35mm<sup>2</sup>) - 30m 1178L SL005

## Adhesive Lined Heatshrink Sleeving 3:1

- Provides environmental sealing for electrical components, wire breakouts and cable jackets
- High strength bonding and flame retardant jacket
- Operating temperature range of -30 to +80 °C
- Supplied in lengths of 1.2m

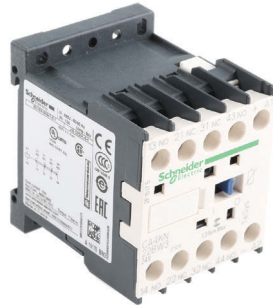


**157-3789** 3mm 2454236001  
**157-3795** 6mm 3633856001  
**157-3802** 9mm 3974176001  
**157-3818** 12mm 7349496001  
**157-3824** 18mm 7259236001  
**157-3830** 40mm 2166936001



## TeSys K control relays

- Consistent connection tightness
- Resistance to vibration & temperature cycling
- Din or screw fixing



<b>759-083</b>	2NO/2NC, 10 A	CA4KN22BW3
<b>759-099</b>	4NO, 10 A	CA4KN40BW3
<b>608-7160</b>	3NO/NC, 10 A	CA2KN31P7
<b>758-822</b>	4NO, 10 A	CA2KN40U7
<b>758-894</b>	3NO/NC, 10 A	CA2KN31F7

## Zelio RXG Interface Relays

- Widely used in PLC interface application for its reliable installation, easy Test & maintenance, slim and spacing saving features



<b>884-1266</b>	240V ac Coil, 8 A	RXM4AB1U7
<b>852-6866</b>	12V dc Coil, 5 A	RXG23JD
<b>884-1562</b>	12V dc Coil, 8 A	RXM4AB2JD
<b>884-1433</b>	12V dc Coil, 12 A	RXM2AB1JD

## PREVENTA Safety Switches

- A complete family of safety switches for ensuring the safe opening and interlocking of equipment guards and covers
- IP67 protected and can achieve Ple/Category 4 within a safety system to EN/ISO 13849-3



<b>397-2150</b>	Non-locking actuator switch, PG13 1NO 2NC	XCSA701
<b>263-3624</b>	Non-locking actuator switch, 2NC+1NO	XCSA702
<b>263-3725</b>	Unlocking solenoid safety switch, 2NO+1NC	XCSE5312
<b>263-3753</b>	Unlocking solenoid safety switch, 2NC+1NO	XCSE7312
<b>305-1966</b>	XCS PA rotating hinge switch, PG11 2NO	XCSPA791
<b>479-3043</b>	Safety limit switch w/5m roller plunger	XCSM3902L5
<b>766-1725</b>	Safety limit switch with roller plunger	XCSM4102L1
<b>296-4675</b>	Miniature IP67 DIN safety switch, 2N/C	XCSPA792
<b>296-4669</b>	Miniature IP67 DIN safety switch, 1NO 1NC	XCSPA592

## Altivar Variable Speed Drives and Soft Starters

- Variable Speed Drive with embedded Services dedicated to process Industry and Utilities for 3 phases synchronous, asynchronous and special motors from 0.75 kW to 1200 kW



<b>125-3278</b>	5Kw	ATV630U75N4
<b>104-868</b>	2Kw	ATV71HU22N4Z
<b>669-5796</b>	0.75Kw	ATV12H075M3

## Harmony XV Signalling Units

- True colour and homogeneity light
- Improved visibility
- LED super-bright flash with long life performance



<b>881-2823</b>	Black Buzzer, 85 Db, 60mm, 24 V	XVUC9S
<b>704-3754</b>	Led Tower, Static Red/Amb/Grn/Blu/Clr	XVC4B5K
<b>294-0562</b>	Xvb Flashing Beacon 5J, 230Vac Red	XVBL6M4
<b>881-2804</b>	Blue Led Beacon, Steady, 60mm, 24 V	XVUC26
<b>294-0512</b>	Red Filament Flashing Beacon W/Base	XVBL4M4
<b>901-2588</b>	Black Voice Alarm, Din96, Pnp, 24Vdc	XVSV9BBP
<b>294-0528</b>	Amber Filament Flashing Beacon W/Base	XVBL4M5
<b>704-3714</b>	Led Tower, Tube Mnt, Static Red/Amb	XVC4B2
<b>294-0382</b>	Red Flashing Lens Unit No Lamp, 24V	XVBC4B4
<b>609-0964</b>	Steady Led Lens Unit, Xvbl0B4	XVBL0B4
<b>293-9922</b>	Clear Static Lens Unit Without Lamp	XVBC37
<b>367-2557</b>	Orange Flashing Xenon Mini Beacon, 24V	XVDLS6B5
<b>294-0376</b>	Amber Flashing Lens Unit No Lamp, 24V	XVBC4B5
<b>294-0398</b>	Beacon Tube Cover, 100mm	XVBC020

## TeSys LE Enclosed Motor Starters

- TeSys LE is a range of enclosed D.O.L motor starters and soft start starters up to 37 kW, that is simple to both use and install
- These compact, ergonomically designed starters can be wall-mounted or installed for local control



<b>351-4776</b>	5.5kW 240V	LE1GBKS55U7
<b>484-7257</b>	11kW 415Vac	LE1GBTO11N7
<b>743-5349</b>	2.2 kW 24Vac	LE1M35B712
<b>744-7866</b>	0.25 kW 240Vac	LE1M35U705
<b>743-5359</b>	7.5 kW 24Vac	LE1M35B722

## PNOZ sigma Configurable Safety Relay

- Safety relay adapted for emergency stop pushbuttons, safety gates and light curtains
- Removable terminals with connection via spring terminals
- Display LEDs for relay status, with expandable option



<b>156-083</b>	PNOZ S3, 24VDC, 2NO 1NC	750103
<b>156-106</b>	PNOZ S4, 24VDC, 3NO 1NC 1SC	750104
<b>156-112</b>	PNOZ S4, 48-240V, 3NO 1NC 1SC	750134
<b>155-822</b>	PNOZ S5, 0-300S, 24VDC, 0-300S	750105

## Stainless Steel Enclosed E-Stops

- Robust Stainless Steel 316L enclosed 40mm head emergency stops perfect for washdown or harsh environments
- Compliant with EN ISO 13850, IEC 60947-5-1 and 60947-5-5 - twist to reset
- Padlockable versions can be locked in the 'off' or triggers position for maintenance tasks



<b>826-4390</b>	2NC/NO, M20 Gland Entry	RS-231001
<b>826-4394</b>	2NC/NO, 1/2" NPT Gland Entry	RS-231002
<b>826-4404</b>	Padlockable, 2NC/NO, M20 Gland Entry	RS-231005

## 10kA Miniature Circuit Breakers

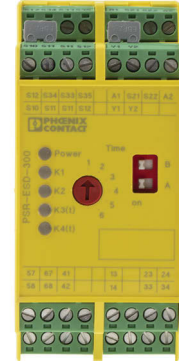
- A cost effective range 10kA rated MCBs available in 1,2,3 and 4 pole configurations from 1A to 63A
- Positive status indication with flag window
- Tripping characteristics B, C and D available from stock



<b>825-5835</b>	3P Curve C 6A	P1MB3PC06
<b>825-5898</b>	3P Curve D 32A	P1MB3PD32
<b>825-5548</b>	1P Curve B 2A	P1MB1PB02
<b>825-5832</b>	3P Curve C 4A	P1MB3PC04
<b>825-5876</b>	3P Curve D 4A	P1MB3PD04
<b>825-5885</b>	3P Curve D 20A	P1MB3PD20
<b>825-5598</b>	1P CURVE C 10A	P1MB1PC10

## PSR Safety Relays with Time Delay

- Two-channel control
- Up to SIL 3 according to IEC 61508
- PL e (according to ISO 13849-1)



<b>6667053</b>	With 6 Safety Contacts	2981428
<b>6667069</b>	With 2 Safety Contacts and 1 Auxiliary Contact	2981499
<b>7125263</b>	With 3 Safety Contacts	2986575

## LED Beacon Towers

- The KOMPAKT 37 is a completely pre-assembled LED signal tower with choice of mountings
- The 37.5mm diameter tower can be installed quickly and easily, offering IP65 protection
- Clearly visible from all positions thanks to the OmniVIEW lens with no blind spots



<b>849-5370</b>	3 Light Elements, Green, Red, Yellow, 24 V ac/dc	69811075
<b>849-5374</b>	2 Light Elements, Green, Red, 24 V ac/dc	69812075
<b>828-8823</b>	Wall Bracket for Kompakt 37	96069805
<b>828-8826</b>	Tube Base for Kompakt 37	96069801
<b>678-2900</b>	Led/Buzzer, Continuous, Red, 24Vdc	45010055
<b>328-0350</b>	Replacement Bulb - Pack of 10	95584034
<b>455-2965</b>	Yellow M20 Thread Mini Led Beacon, 24Vdc	23030055
<b>314-7095</b>	Permanent Filament Beacon, Yellow, 70mm	84030000

## Eco LEDA100 LED Beacon with Buzzer

- Beacon with integral 80dB audible buzzer offering two selectable stages of alarm, flashing or continuous (static) mode selected by PCB jumper
- The LED ECO range offers a cost effective alternative against more traditional incandescent lamp beacons with longer life and increased reliability
- Protected to IP65, 3 point mounting and multi-voltage 40-380Vdc, 85-285Vac supply input



<b>865-1647</b>	Amber, 40-380Vdc, 85-285Vac	LEDA100-05-01
<b>865-1656</b>	Red, 40-380Vdc, 85-285Vac	LEDA100-05-02
<b>755-9616</b>	Led Beacon/Sounder 24Vdc, Blue	LEDA125-02-03RS
<b>365-8141</b>	Single Point Mounting Bracket For Beacon	50006RS
<b>865-1681</b>	Leds100 Beacon, Amber, 8-20 Vac/Dc	LEDS100-01-01
<b>698-7228</b>	Grn Lens For Compact Dome Beacon	50021-RS
<b>666-7498</b>	Xenon Beacon 5J Amb 15-28Vac/Dc Deep	X195-02WH-01RS



## Miniature Sealed Pushbutton Switches (SPNO)

- Momentary action, rugged panel sealed pushbutton switches
- IP67 and impact resistant
- Panel cutout diameter 13.6mm
- Rating 400mA @ 32Vac



### ITW Switches

<b>321-234</b>	Red	59-900005
<b>321-256</b>	Green	59-900006
<b>321-278</b>	Black	59-900004

## Snap Action Microswitches

- Precision movements and exceptional repeat accuracy
- Robust metal housing
- Plunger actuator
- Rated up to 250Vac 15A

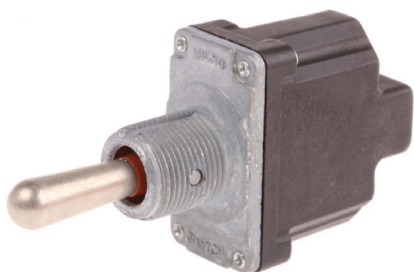


### saia-burgess

<b>414-5646</b>	Standard IP54	01710
<b>414-5652</b>	Leaded sealed to IP67	4BRSH

## Honeywell NT Series Toggle Switch

- Single Pole Double Throw (SPDT) Toggle Switch
- Tactile feedback of toggle for gloved operation



### Honeywell

<b>812-6573</b>	(On)-Off-(On)	1NT1-7
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## Plunger Microswitches

- Metal housed 15A @ 250V AC rated
- Snap action micro switches
- Mechanical life: 1,000,000 operations
- Single pole changeover contacts
- Insulated terminal cover plate



<b>797-2494</b>	Nylon roller
<b>797-2501</b>	Metal button screw terminal

## Miniature Plug-In Power Relays

- Miniature power relays with LED indicator available in single, 2, 3 and 4 pole configurations
- LED indicator with lockable test button and inspection window
- Gold plated contacts



<b>121-7809</b>	16A SPCO 230Vac
<b>121-7810</b>	10A DPCO 12Vdc
<b>121-7814</b>	10A DPCO 230Vac
<b>121-7821</b>	10A 4PCO 24Vdc
<b>121-7824</b>	10A 4PCO 230Vac

## TE Connectivity Four Pole Double Throw Toggle Switches

- Toggle switches with silver plated contacts sealed to prevent the ingress of dust or liquids
- Connection via 250in. (1/4in.) receptacles or soldering
- For biased operation '(on)' refers to momentary on position



<b>266-2234</b>	On-Off-On	A4TP15W04
<b>266-2212</b>	On-On	A4TN15W04
<b>266-2206</b>	On-Off, 20A	A4TK15W04
<b>317-847</b>	Dpdt On-Off-On	AWTP1504

## Barrel Type Gear Couplings

- Curved tooth gear couplings to compensate for axial, radial and angular shaft displacement
- Each coupling comprises of three parts (sold separately) two coupling hubs and a gear coupling sleeve
- Available in various sizes from 14 mm to 32 mm



- 810-0690** Coupling Hub, 14mm, 10Nm
- 810-0710** Coupling Sleeve for 14mm Hub
- 776-8352** Instant Air Coupling With 1/4 Female Bsp
- 776-8330** Instant Air Coupling With 3/8 Male Bsp
- 667-1746** Male Thread Coupling R 3/8
- 667-1740** Male Thread Coupling R 1/2

## Complete Jaw Couplings

- Complete torsionally flexible coupling
- Provides damping to reduce shock and vibration
- Used to correct small angular, axial and parallel mis-alignments
- T-PUR spider for improved heat resistance and long life



- 808-7266** 6 → 16mm bore, 30mm O.D. , 35mm length ROTEX14-COMplete-KTR
- 808-7301** 22 → 28mm bore, 56mm O.D. , 78mm length ROTEX24-COMplete-KTR
- 808-7339** Rotex Coupling Spider, Size 38, 64 Shore ROTEX38-64SHEL-KTR
- 808-7250** Rotex Coupling Spider, Size 14, 92 Shore ROTEX14-92SHEL-KTR

## Wrapped V Belts

- Precision made, wrapped Vee belts, using a special stiff-yet-flexible crack resistant base for long life
- Anti-static, heat, oil and abrasion resistant
- Full range of A, B and Z profiles available from stock - visit [uk.rs-online.com](http://uk.rs-online.com) and search for 'RS V belts' to find & buy



- 472-070** A22 13x560mm
- 471-960** A23 13x585mm
- 471-887** A26 13x660mm
- 471-562** A28 13x710mm
- 471-566** A29 13x730mm
- 472-032** A33 13x838mm
- 472-010** A37 13x940mm
- 471-730** Z24 10x610mm
- 471-724** Z25 10x630mm
- 471-714** Z26 10x660mm
- 471-708** Z28 10x710mm

## Steel Roller Chain

- 5m long British standard simplex chain
- Proof loaded after assembly
- Manufactured in accordance with BS228, R606 and DIN8187



- 612-5076** 9.25mm Pitch; 8.2mm plate height; 6.35mm roller dia. CW06B-1

## Rotary Bearings

- Variety of bearing units to keep your production line moving



- 514-271** Machined Needle 8mm I.D, 15mm O.D
- 514-035** Needle Roller Bearing HK 0408, 4mm I.D, 8mm O.D
- 285-0611** 25mm Deep Groove Ball Bearing 37mm O.D
- 719-1998** 6mm Deep Groove Ball Bearing 19mm O.D
- 286-7631** 20mm Deep Groove Ball Bearing 42mm O.D
- 513-755** Thrust Roller Bearing 81105TN, 25mm I.D, 42mm O.D
- 144-0868** 25mm Deep Groove Ball Bearing 42mm O.D

- NK8/16TN-\*SKF
- HK0408-\*SKF
- 61805-2RS1-\*SKF
- E2.626-2Z/C3-\*SKF
- 6004-\*SKF
- 81105TN-\*SKF
- 61905-2RS1-\*SKF

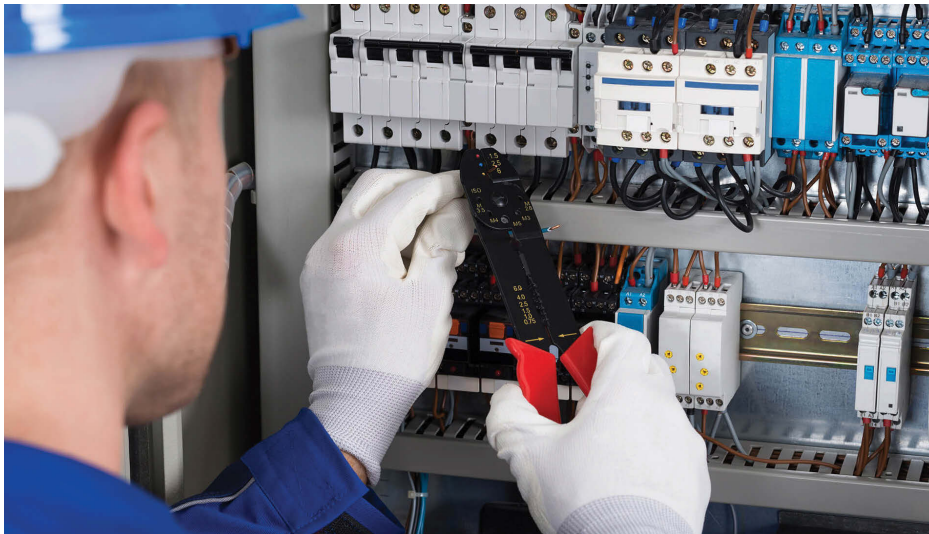


TAKING THE PAIN OUT OF

# PLANT MAINTENANCE

**Careful planning and close collaboration with suppliers are key elements in achieving effective plant maintenance, according to a leading UK industrial laundry firm.**

Berendsen UK Ltd, part of the Elis S.A. group, an international provider of textile, hygiene and facilities services across Europe and Latin America, outlines why this approach provides the building blocks for effective plant maintenance.



Plant maintenance is always an area of business that needs to be handled carefully. “While you have to factor in a certain amount of planned and unplanned maintenance, the aim is always to have your machines working as close to 100% of the time as you can,” explains Barry Quinn, Engineering Manager at Berendsen. “A good plant-maintenance strategy is essential for us – any downtime has a direct impact on the bottom line, so you need to be set up so that both planned and unplanned maintenance has as little impact to your daily operations as possible.”

## Be prepared

Planned maintenance, as the name suggests, comes down to organisation, according to Barry. “You need to firstly identify the best time to do the work and where it will have least impact on your productivity,” he says. “Then you need to make sure that you will have the parts required – we work with RS who ensure we have everything we need, when we need it.”

When it comes to unplanned maintenance, however, the secret is preparation. Berendsen relies on a huge number of machines across its 60 sites, and unplanned downtime has a direct impact on productivity for each of these operations, so Barry has implemented three initiatives to help reduce downtime.

**“We rely on RS’s knowledge to make everything run smoothly”**

*Barry Quinn*  
Engineering manager, Berendsen

Firstly, the company uses a clear priority system based on which machine is not working and how critical it is to productivity. “If a boiler goes down then the whole site is down, so that is of the utmost priority,” says Barry. “A single machine in a line of six still needs to be fixed within a few hours, but is not as business critical.”

Next, the number of engineers on duty has been doubled. “We have a minimum of two on site per shift,” Barry adds. “Quite simply, two engineers can usually fix a problem more quickly than one, and it’s also not unknown for more than one machine to go wrong at the same time, so this has proven to be very useful.”

Finally, Berendsen works very closely with key suppliers to lean on their knowledge

and insight so that replacement parts are available as and when they are needed. In the case of RS, Berendsen makes use of the company’s Scan stock system.

“After an initial meeting, our team would look at the organisation’s recent stock ordering history and what they use,” says Grace Skewis, RS Scan stock Rep. “We would then look at how those orders affect their planned maintenance. We will also closely monitor these orders on an ongoing basis to provide data. We use that data to offer a reporting service, where we review with the customer the stock they have on hold and whether it’s still needed. Working together and providing current data allows us to adjust stock min/max levels as appropriate for their changing needs.

“The end goal is to be in a position to sit with a customer and look at what work they have coming up on site, with planned maintenance, and we can make sure that everything they need for that is in place and will be delivered in good time. It helps make the process much smoother and reduces the risk of maintenance taking longer than planned.”

The system also has benefits when it comes to unplanned maintenance, as Barry found earlier this year. “We use the data from RS to adjust our stock levels and avoid holding unnecessary parts or add additional parts





that are critical to keeping key machines running,” he says. “We had a major issue recently where several machines went down and needed a number of the same parts, but thanks to Scan stock, we had the right number on site and avoided a lengthy delay in getting everything up and running again.”

### Look to collaborate

Grace and Barry agree that collaboration between a business and its suppliers is crucial when it comes to effective plant maintenance. “We look at RS and our other suppliers as partners,” says Barry. “We work together to make sure that our machines are always online. We rely on RS’ knowledge to make everything run smoothly.”

Grace adds: “We need to work with the customer as part of a team. I spend time with my customers and get to know their business so that I can give them advice that benefits them. For example, if a customer orders a certain part once every six months, this could be a low usage item but a critical spare. We would keep two in stock and only re-order when one is used – this ensures that we have a spare part at all times in the event of an emergency and re-stock only as required.

“It may sound simple, but it’s these sort of steps that avoid unnecessary downtime.”

“At the end of the day, work with your suppliers and you will see the benefits”

Grace Skewis  
RS Scan stock Rep.

### Identify the right solutions

It’s clear to see that the best approach for modern maintenance is a combination of planned and preventative measures, avoiding reactive maintenance whenever possible. There is a plethora of solutions available to help in this area: from handheld test and measure equipment that can be used by operatives to monitor variables such as pressure and temperature, to sensing products that monitor machine condition and alert operatives to potential issues. When it comes to smart solutions, the latest sensors allow integration with connected machines, with cloud computing platforms providing data to determine the health of the machine,

enabling prediction of potential points of failure for breakdown. IoT will fast become the main element in the creation of an effective predictive maintenance strategy.

Making intelligent product selections can also help avoid breakdowns. Choosing to fit long-life bearings helps negate downtime, while ensuring you have the right lubrication is vital to obtaining the best operational life from mechanical systems. Investing in more advanced test and measurement such as motor analysers, thermal imagers and vibration analysers can help uncover unseen component degradation prior to the point of failure.

Keeping abreast of technology evolution and solutions, planning how best to structure and deploy maintenance teams, and ensuring the right parts are available when required are all critical to an effective maintenance strategy. Working with a knowledgeable distributor such as RS, which offers guidance material online, and works closely with leading brand specialists to advise on specific applications, will be invaluable for accessing the right products and knowledge to optimise a maintenance programme.

## Roundline Pneumatic Cylinders

- ISO6432 roundline profile double-acting cylinders offering high performance and reliability at a cost effective price
- 304 Stainless steel body & piston
- Pre-lubricated NBR seals and end-of-stroke buffer
- 1-10bar operating pressure range



- 304-3555** 20 x 50 mm
- 304-3909** 25 x 200 mm
- 304-3612** 25 x 100 mm
- 304-3606** 25 x 80 mm

## VDMA Profile Cylinders

- CP96-C series double-acting pneumatic cylinders feature both air and bumper cushioning reducing cycle time and the noise at the end of the stroke
- Full range available online - visit [uk.rs-online.com](http://uk.rs-online.com)



- |   |                           |
|---|---------------------------|
| <b>263-8900</b> 16mm Bore, 100mm Stroke           | CD85N16-100-B(RS263-8900) |
| <b>624-0169</b> 12mm Bore, 25mm Stroke            | CD85N12-25-B              |
| <b>700-6055</b> 25mm Bore, 50mm Stroke            | CD85N25-50C-B             |
| <b>721-3632</b> 32mm Bore, 25mm Stroke            | CDQ2B32TF-25DZ            |
| <b>264-6169</b> Pneumatic Needle Cylinder, 4X20mm | CJ1B4-20SU4(RS264-6169)   |
| <b>722-6993</b> 63mm Bore, 20mm Stroke            | CDQ2B63TF-20DZ            |
| <b>916-6752</b> 32mm Bore, 80mm Stroke            | CP96SDB32-80C             |

## Polyurethane Pneumatic Tubing

- Flexible silicone free tubing designed to be routed into small places
- Ideal for pneumatic control and chemical transfer lines - from -50 to +55°C
- Full range from 4 to 12mm OD available online.



- 774-7012** Black 4mm ID, 6mm OD - 30m Reel
- 774-7021** Blue 4mm ID, 6mm OD - 30m Reel
- 774-7034** Black 5mm ID, 8mm OD - 30m Reel
- 774-7052** Black 7.5mm ID 10mm OD - 30m Reel
- 774-7056** Blue 7.5mm ID, 10mm OD - 30m Reel

## Pneumatic fittings

- One-touch push to connect fittings sold in bags of 10
- Strong engineering plastic (Polyoxymethylene) construction and 10bar rated
- Can be used with nylon or polyurethane tubing



- 916-0870** 4mm straight adaptor - Pack of 10
- 916-0873** 6mm straight adaptor - Pack of 10
- 916-0877** 8mm straight adaptor - Pack of 10
- 916-0886** 10mm straight adaptor - Pack of 10
- 916-0899** 4mm Tee tube to tube - Pack of 10
- 916-0902** 8mm Tee tube to tube - Pack of 10
- 916-0906** 10mm Tee tube to tube - Pack of 10

## Tube & Hose Cutters

- A Professional compact adjustable tube cutter featuring double rollers and suitable for copper pipes from 3-28.5mm
- A lightweight hand operated hose cutter suitable for air conditioning & other plastic tubing up to 13mm (1/2in)



- 813-2726** Pro Compact Copper tube cutter 1/8" to 1 1/8"
- 828-0223** Lightweight cutter 13mm max.

## MS4 & MS6 Filter Regulators

- MS-LFR series combined pressure regulator and filter remove contaminants from compressed air down to a particle size of 5 µm or 40 µm (dependent on filter cartridge)
- High flow rate and integrated return flow exhaust
- Can be fitted with analogue gauge or digital LCD pressure gauge
- Rotary knob with detent can be locked to prevent setting changes



- |   |        |
|---|--------|
| <b>121-5652</b> 40µm G 1/4, 12 bar        | 529150 |
| <b>121-5673</b> 5µm G 1/2, 20 bar         | 529184 |
| <b>121-5670</b> 5µm G 1/2, 20 bar         | 529176 |
| <b>121-5654</b> 40µm G 1/4, 14 bar        | 529156 |
| <b>121-5667</b> Mounting Bracket - MS4-WR | 526064 |

**Fluke Multimeter 110 Series**

- True-RMS for accurate ac measurements of non-linear loads
- VCHEK™ measurement function to test for voltage or continuity simultaneously
- Min/Max function to record level fluctuations
- Diode test for testing general purpose germanium, silicon, and power diodes
- 9999µF capacitance measurement
- Category CAT III 600 V and Category IV 300 V safety rated
- Fluke 115 Digital Multimeter, 10A ac 600V AC
- Fluke 116 Specifically designed for HVAC professionals,
- Built in thermometer and temperature probe included for HVAC applications



<b>501-382</b>	Fluke 113 Utility Multimeter	FLUKE-113
<b>616-1498</b>	Fluke 114 Electrical Multimeter	FLUKE-114
<b>616-1454</b>	Fluke 115 General Purpose Multimeter	FLUKE-115
<b>616-1460</b>	Fluke 117 Electrician's Dmm with non-contact V detection	FLUKE-117

**Fluke ii900 Sonic Industrial Imager**

- Ensure proper air pressure to your pneumatic equipment
- Lower utility costs
- Reduce leak detection time
- Improve reliability in your production line



<b>187-6163</b>	1280 x 800pixel	ii900
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**Fluke 810 Vibration Meter**

- On-board identification and location of most common vibration mechanical faults reducing downtime
- Fault severity scale with four severity levels helps you prioritize maintenance work
- Repair recommendations advise technicians on corrective action



<b>744-2192</b>	¼ VGA, 320x 240 TFT LCD w/ LED	FLUKE-810
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**Megger MIT230 Insulation Tester**

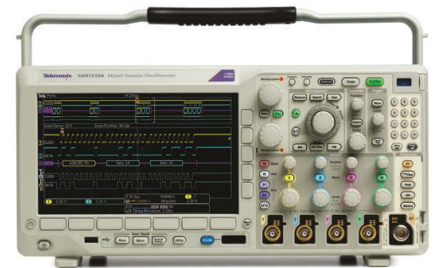
- Digital display of insulation measurement up to 1000MΩ on a linear or logarithmic analogue arc and a digital display
- Continuity range has 0.01Ω resolution
- Automatic continuity testing leaves both hands free: no need to press the test button
- Automatic voltage detection avoids accidental contact with dangerously live circuits



<b>535-3191</b>	999MΩ CAT III 300 V	MIT230
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**Tektronix MDO3052 Mixed Domain Oscilloscope**

- (2) 500MHz analogue channels
- 10M record length
- 500MHz spectrum analyser



<b>797-3328</b>	500Mhz 2C,	MDO3052
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**Megger DLRO10HD Ohmmeter**

- Heavy duty low resistance ohmmeter combining rugged construction with accuracy and ease of use
- It features an internal rechargeable battery and can also operate from a mains supply, even if the battery is completely flat



<b>136-5760</b>	10A	1006-603
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**S-Force Series Axial Fan**

- 3-Phase fan for efficient running
- Compact design for space saving
- Low operating noise at high back pressure



**ebmpapst**

**740-6382** 200mm 1220Cu.M/H 48V 2218F/2TDH4P

**ebm-papst W2E250 Series Axial Fans**

- Diecast aluminium housing
- Motor stall protection
- Can be operated at both 50 Hz and 60 Hz
- Terminal power connection



**ebmpapst**

<b>841-4915</b> 280 x 80mm, 1695m <sup>3</sup> /h, 125W, 230 V ac	W2E250-HP06-01
<b>825-8077</b> 320 x 280 x 80mm, 1970m <sup>3</sup> /h, 180W, 115 V ac	W2E250-HJ32-01
<b>825-8042</b> 320 x 80mm, 1970m <sup>3</sup> /h, 150W, 230 V ac	W2E250-CB05-51

**DC Axial Fans - Series 420 J**

- Energy-efficient 420J tubeaxial fan
- 40 x 40 x 28mm sizing
- Back pressure of up to 530 Pascals, dependant on model
- High power density
- Offers versions permitting PWM control input and speed sensing
- Environmental protection (IP54) available



**ebmpapst**

<b>840-5557</b> 424JN 31m <sup>3</sup> /h 24V 4.2W	424JN
<b>840-5551</b> 424JH 38m <sup>3</sup> /h 24V 7.1W	424JH
<b>840-5560</b> 424J/2HP 38m <sup>3</sup> /h 24V 7.9W - PWM Input - Tacho	424J/2HP
<b>914-4247</b> 424J/2HU 38m <sup>3</sup> /h 24V 7.9W - PWM Input - Tacho - IP54	424J/2HU

**Pedestal and Wall Mounted Cooling Fans**

- Available in stand or wall mounted configurations
- Designed to increase comfort and lift productivity by providing relief to people working in hot locations
- Robust, durable construction, 90° oscillating head with 200 up and down tilt



<b>181-8940</b> Pedestal	PSET634-03SP
<b>181-8941</b> Wall Mount	PWET634-03SP

**AC Fan Kits**

- 230Vac fans with power lead and metal guard [-KRO] or air filter [-KR1] option included
- Simplifies buying process
- Lead 610mm
- Filter pads that can be changed without switching off the fan



**ebmpapst**

<b>797-2233</b> 4890N-KR1 80m <sup>3</sup> /h 11.0W 119x119x38mm + filter	4890N-KR1
<b>797-2236</b> 4850N-KR0 100m <sup>3</sup> /h 19.0W 119x119x38mm + guard	4850N-KR0
<b>797-2249</b> 4650N-KR0 160m <sup>3</sup> /h 19.0W 119x119x38mm + guard	4650N-KR0
<b>797-2242</b> 4650N-KR1 160m <sup>3</sup> /h 19.0W 119x119x38mm + filter	4650N-KR1

**Sleeve Bearing Axial Fans**

- Motor overload protection
- Both 230 V ac and 115 V ac versions available
- Compact and robust fan design
- Fan operates at various speeds at both 50 Hz and 60 Hz



**ebmpapst**

<b>211-9308</b> 75Cu.M/H 240Vac	3650
<b>281-3757</b> 78.2Cu.M/H12Vdc	8412NGH
<b>337-3115</b> 83.9Cu.M/H12Vdc	3412N

## High Capacity AA NiMH Batteries

- >500 Charge/Discharge cycles
- High safety standards and good cycle stability
- Fast charging



536-473 2850mAh

5035092

## Lead Acid Battery

- High quality and reliability
- Exceptional deep discharge recovery
- No corrosive gas generation



## Panasonic

888-2469 12V 100Ah

LC-XB12100P

## 12V NP Lead Acid Batteries

- High quality rechargeable lead acid batteries ensures that no electrolyte leakages occurs from the case or terminals
- Maintenance free
- Safe low pressure venting system, which releases excess gases and automatically reseals should there be a build up of gas within the battery due to overcharging
- Designed for 5 years of life
- 12V rating - for more ratings visit our website



597-835 7Ah

NP7-12RS

597-841 12Ah

NP12-12RS

597-807 1.2Ah

NP1.2-12RS

597-813 2.1Ah

NP2.1-12RS

128-7028 2.3Ah

NP2.3-12RS

198-8068 4Ah

NP4-12RS

## COTEK 3-Slot Lead Acid Battery Charger

- Universal AC input with active PFC
- Compatible with Lead Acid, Li-ion, Gel and AGM batteries
- Support remote controller CR-1 as optional accessory.



866-0316 24V 25A

CX2425

## Energy Generation Kit Solar Up One

- The Phaesun kit makes it possible to operate 12V consumers such as lamps, radios or small pond pumps without problems



860-2913 Energy Generation Kit

600239

## Varta V15H 3.6V NiMH Rechargeable Button Battery

- Ideal for a rechargeable power source to maintain voltage rails in standby/memory support applications
- Use a resistor/diode constant current charging circuit
- Operating temperature range: 0 °C → +65 °C



422-387 V15H 3.6V 16mAh

55602303013



**Facom 3 drawer Metal Tool Chest**

- 2 Lateral handles
- The option of stacking
- Polypropylene drawers fitted with ball bearing joints
- Load resistance: 15kg



**898-7413** 270mm x 270mm x 510mm

BT.203

**Xcelite Polyethylene Attaché Tool Case**

- Contains 53 individual hand tools, 31 Series 99° interchangeable screwdriver/nutdriver blades and handles, and 2 specialized screwdriver/nutdriver kits (as listed)
- Contains 3-panel hinged tool pallet in lid plus additional pallet in bottom
- Super tough, black polyethylene with rich looking black anodized aluminium hardware



**488-267** 17 3/4 x 12 5/8 x 5 3/4 in

TCMB100ME

**GT Line Polypropylene Tool Case Wheeled**

- Lightweight case
- Injection moulded polypropylene
- Rubber feet for stabilising
- Central locks with key



**768-9758** 430 x 320 x 160mm

BOXERWHPEL

**S-330 Socket Set**

- High quality 1/4 in and 3/8 in square drive socket set supplied with 34 piece socket and bits
- Contains the most popular sizes sockets, a selection of bits and extensions plus a ratchet offering multiple positions
- Ratchet wrench comes with a compact sturdy soft grip handle, thumb slide direction lever and quick release button
- Case is labelled for quick and easy identification



**337-3957** 1/4 in, 3/8 in Square Drive

S-330

**Facom 12 Piece L Shape Torx Key Set**

- T7; T8; T9; T10; T15; T20; T25; T27; T30; T40; T45; T50



**105-0501** L-Shaped Torx 12P

89.JL12

**Knipex End Cutting Nipper Cable Cutter**

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



**136-7418** 280 mm

98 62 02

Visit [nz.rs-online.com](http://nz.rs-online.com) to order today!

**Single Cylinder Trolley**

- Steel tubular frame with a pierced base to disperse condensation
- Designed to carry cylinders up to a maximum diameter of 280mm
- Galvanised chain to secure cylinders
- Rubber wheels



**134-257** 150kg Load Capacity

**CRIMPFOX 4 in 1 Multi-Function Crimp Tool**

- The crimping pliers are suitable only for stranded conductors
- Equipped with pressure lock, magazine, cutting, stripping, twisting, and crimping unit
- Integrated pressure lock ensures consistently high-quality crimping
- One tool saves up to 30% working time



**871-2199** Crimp Tool

1200101

**Storage Bin & Panel Kits**

- Complete kits of bins and louvered panel
- Bins are polypropylene and the louvered panel is steel
- Kit 1 - 438x457mm 8x yellow, 4x red, 4x blue, 4x green
- Kit 2 - 946x457mm 4x yellow, 6x red, 4x blue, 1x green
- Kit 3 - 946x914mm 8x yellow, 12x red, 8x blue, 2x green
- Kit 4 - 946x914mm 8x yellow, 6x red, 12x blue, 4x green
- Kit 5 - 438x914mm 8x yellow, 8x red, 8x blue, 8x green



**223-7456** Kit 1

**RS PRO 20 Piece VDE/1000 V ESD Tool Kit**

- Designed for live line working - live working hand tools for use up to 1 000 V ac and 1 500 V dc
- Long lasting and hard wearing tools
- Each tool is injection moulded with Nylon 11 - can withstand extreme temperatures and water submission



**911-1534** Insulated Deluxe Tool Kit 20Pc

**GT Line Aluminium(Strim), Vacuum Formed ABS Tool Case**

- 2 pallets with elastics
- Bottom tray with removable dividers
- 2 Side locks with key
- Soft grip handle



**123-1792** 453 x 190 x 332mm

REVO PEL

**SKF Hydraulic Bearing Puller**

- Integrated hydraulic cylinder, pump and puller, which is ready to use.
- Safety valve to prevent spindles and pullers from getting overloaded
- Easy centring of the puller with the spring loaded centre point



**732-4788** Easy Pull Jaw Puller

TMMA75H



**Orange Hi-Vis Waistcoats**

- Hi-Vis with reflective tape ensures visibility
- Adjustable hook and loop fastening
- Fully certified



**918-5838** S-M

**918-5841** XXL-XXXL

**Push Button Lockouts, with Standard Cover**

- Fast and convenient lockout at the point of need
- One time installation of the low profile, unobtrusive lockout base



**876-5395** 22mm Shackle

130820

**PAL Ecopak Plastic Disposables Dispenser**

- This PAL Ecopak Dispenser provides a convenient and versatile option for dispensing a wide range of PAL products
- Quick and easy to install, the dispenser offers a hygienic way to store and dispense high use products helping to keep the workplace clean and tidy



**884-2449** Dispenser For Mob Caps/Overshoes

X641100N

**RS Pro Roller Shutter Security Contact and Magnet**

- Normally open, closed loop
- Grade 2
- Maximum voltage 125Vac / 100Vdc
- Tamper loop



**122-0718** 500mA, 100 V dc, 125 V ac

**Apollo Optical Smoke Detector**

- Ionisation smoke detectors are suitable for use in areas where high levels of smoke may be expected
- Optical smoke detectors incorporate a pulsing LED and a photo-diode which 'sees' the smoke and changes the alarm state



**240-0553** 9→33V dc

TOA-0002

**Electric Shock Guidance Poster**

- First Aid laminated guidance poster, provides essential first aid and safety information for both first aiders and non first aiders
- Fully updated with the latest guidance, resuscitation and practice techniques
- Full colour illustrations with step by step instructions
- Dimensions: 59x42cm



**787-3729** 420 mm, 590mm



**ABB Thermoplastic Wall Box IP66**

- Operating temperature of -25°C to +100°C
- 100% recyclable
- Has a resistance to abnormal heat and fire up to 750°C

**-10%**



**493-9867** 210mm x 400 mm x 335 mm

1SL0201A00

**\$180.02**

**Schneider Electric Tesys D LC1D 4 Pole Contactor**

- Built-in auxiliary contacts for added switching capability
- Bidirectional peak limiting diode suppressor to protect the coil
- Can be panel mounted with screws or DIN Rail mounted

**-15%**



**744-7585** 4NO, 40 A, 24 V dc Coil

LC1DT40BL

**\$698.34**

**Idec HG2G Series Touch-Screen HMI Display**

- I/O Expansion supported
- Remote access, control and monitoring facilities
- 12MB internal memory

**-10%**



**812-9708** 5.7 in TFT LCD 640 x 480pixels

HG2G-5FT22TF-B

**\$1,355.61**

**Crouzet Voltage Monitoring Relay With SPDT Contacts**

- Adjustable time delays.
- Control at 50 Hz, 60 Hz or DC voltage.
- Measurement in true RMS

**-25%**



**262-097** 1 Phase, 110 → 240 V ac/dc

84872834

**\$181.46**

**Siemens Ultrasonic Level Controller - Panel Mount**

- HART 7.0 USB communication
- 4 to 20 mA output / 3 relays
- Operational range 0.3m to 60m (transducer application/dependant)

**-8%**



**804-3945** 10 → 32 V dc, 100 → 230 V ac 2 Input

7ML5050-0AA11-1DA0

**\$1,612.30**

**Siemens Overload Relay**

- High degree of contact stability at low voltages & current
- Suitable for use with solid-state circuits with currents ≥ 1 mA at a voltage of ≥ 17 V
- Capable of expansion by up to four contacts through use of snap-on auxiliary switch blocks

**-20%**



**745-0581** 2NO/2NC, 10 A, 110 V dc

3RH1122-1BF40

**\$70.17**



# SPECIAL OFFERS



## EA-PS 3000 series Bench Power Supply

- Current and voltage can be adjusted with a coarse and precision regulator
- Constant current and constant voltage operation
- Temperature-controlled fan output

**-8%**



**493-7827** 650W, 1 Output 0 → 65V 10A PS 3065-10 B **\$1,325.21**

## Keysight Technologies U1192A Clamp Meter

- Unique wire separator to separate wires from a bundle
- Vsense to perform non-contact voltage detection
- Built-in LED flashlight to illuminate test area

**-20%**



**746-7113** Max Current 400A ac CAT III 600 V, CAT IV 300 V U1192A **\$170.72**

## Tektronix Oscilloscope Probes

- High quality passive voltage probes suitable for use with Tektronix oscilloscopes or as general purpose replacements
- Each probe features compensation trimmers to allow matching to instruments
- Supplied complete with accessories

**-10%**



**715-8746** CAT II 300V rms, CAT I 400V rms TPP0101-PK10 **\$679.04**

## Tektronix AFG3052C Arbitrary Waveform Generator

- The 5.6 inch (142mm) colour display gives confidence in signals because all relevant settings and waveform graphs can be seen in a single glance
- The instrument depth of 6.6 inches (168mm) frees up bench space
- Tektronix ArbExpress software is include

**-8%**



**774-2978** 50MHz 2 Channel AFG3052C **\$5,619.77**

## Fluke 750P04 Pressure Calibrator

- 0.025% reference uncertainty
- 6-month and 1-year specifications
- Temperature compensated 0°C to 50°C

**-8%**



**805-2276** Pressure Module 0-15 Psi (0-1 Bar) FLUKE-750P04 **\$2,269.08**

## Fluke RTD Sensor

- -40°C min +260°C max, 90mm Probe Length x 4.8mm Probe Diameter

**-12%**



**506-7092** Fluke 80Pr/60 Rtd Probe 80PR-60 **\$137.77**

Visit [nz.rs-online.com](http://nz.rs-online.com) to order today!

**Knipex 11 Piece VDE/1000 V  
Telecommunications technician's set**

- For telecommunications technicians and electricians
- Grips with thick-walled multicomponent cases
- Chrome-plated heads

**-8%**



**186-5505** 11 Piece Cased Set 00 19 41 **\$355.01**

**RS PRO HSS 0.85mm Jobber Drill Bit**

- DIN338.
- Bright Finish with split point

**-15%**



**787-7355** 30 mm Plain Shank (1 tube of 5) **\$5.60**

**Bahco Phillips VDE Screwdriver**

- High grade alloy steel blades fully hardened to DIN and ISO standards
- IEC 60900 compliant

**-15%**



**288-7792** No3 x 150mm BE-8630S **\$47.73**

**3M Zirconia Aluminium Fine Flap Disc**

- Run-on a right angle grinder 566A discs are a one-step system for grinding and blending
- Alumina zirconia self-sharpen and provides extended life and more cutting power than aluminium oxide

**-10%**

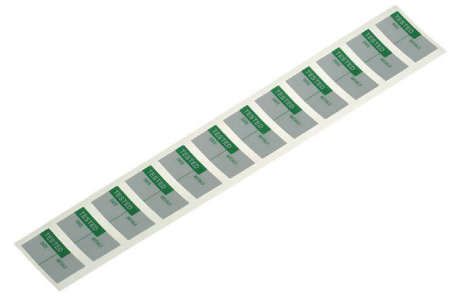


**153-612** P120 Grit, 13000rpm 3M556D B61787 **\$4.71**

**Brady Pre-Printed Adhesive Label**

- For rough/powder coated surfaces
- Also for dirty/demanding surfaces and manufacturing environments

**-10%**



**419-0674** Label 'Tested' - Pack of 120 RSMONDO-WOAF38 **\$66.28**

**Loctite® 660 Quick Metal**

- Non-metallic, non-running anaerobic paste which only cures between active metal surfaces
- Product hardens into a tough plastic which is resistant to solvents and lubricants

**-10%**



**496-136** 50 ml 229232 **\$69.16**



# SPECIAL OFFERS



## Lapp 3 Pair Screened Multipair Industrial Cable

- Shielded data lines with fine-wire flexible cord made of plain Cu wires
- Cores stranded in pairs (TP)
- Pairs stranded in layers

**-15%**



**LAPP GROUP**

**608-4010** 0.14 mm<sup>2</sup>(IEC60332-1) Grey - 100m 0035141 **\$245.56**

## HellermannTyton Cable Tie Cable Marking Kit

- Temporary or permanent cable labelling
- -60°C to 65°C operating temperature
- Compatible with laser printers

**-10%**



**HellermannTyton**

**364-6621** 236 Markers 364-6621 **\$144.47**

## Vishay 535 Series Wirewound Potentiometer

- Wirewound potentiometers
- Stainless steel end slotted shaft
- Compact glass filled phenolic housing

**-10%**



**460-1944** 6.35 mm Dia. Shaft 5-Turn 535B1502JC **\$17.93**

## Han A Series Side Entry Connector Hood

- Side entry plastic hood, PG-11 size 3A

**-15%**

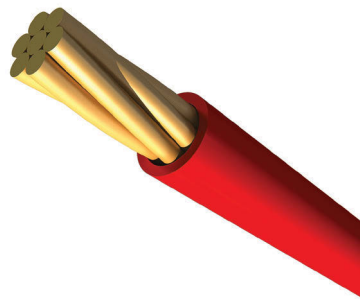


**181-0612** Plastic Hood 09200030620 **\$11.48**

## Alpha Wire EcoWire Series Red Hook Up Wire

- Fully recyclable
- Up to 45% smaller diameter than PVC
- Up to 40% lighter than other insulation materials

**-15%**



**687-7607** 14Awg 600V UI11028 Red - 30m 6717 RD005 **\$162.34**

## TE Connectivity Transparent Solder Sleeve

- One-piece design
- Easy installation and lower installed cost
- Preinstalled termination leads for convenience and ease of installation

**-10%**



**542-5791** 3.7 → 7mm - Pack of 10 CB0140-000 **\$67.83**

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