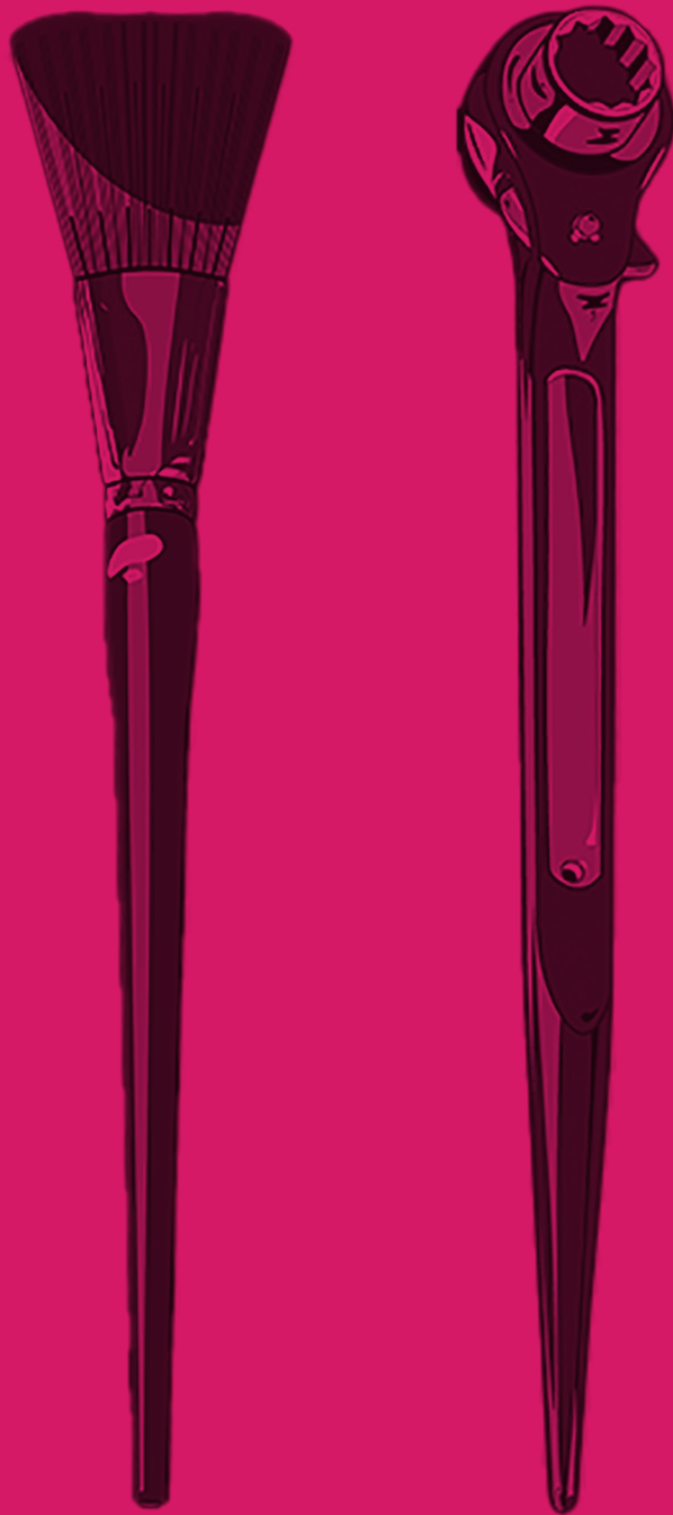


# Electrical & Lighting



# FLINTS

*The one-stop-shop that delivers to your door*

## Procell Alkaline & Lithium Batteries

The professionals' choice for hand torches and radio microphones. Great value, why not stock up now?



code	description	price	10+
DURAAAN	AAA [1.5 V]	£0.39	£0.35
DURAAAN	AA [1.5 V]	£0.39	£0.35
DURCN	C	£0.98	£0.88
DURDN	D	£1.49	£1.34
DUR9VN	9 V	£1.49	£1.34
DURCR123N	CR123 Lithium	£0.95	£0.85

## Coin Cell Batteries

Choose the Duracell Alkaline LR44 type to power the Faithfull Digital Calipers [page 315]. Both types sold in packs of two.



code	description	qty	price
DURCR2032	Spare Coin Cell battery CR2032	2 per pack	£1.95
DURLR44	LR44 [1.5 V Alkaline] pack of 2	2 per pack	£1.50

## Black Rubber Cable

This tough, black rubber-sheathed [TRS] 1.5 mm<sup>2</sup> cable is ideal for making up your own extension leads. Three core. Conformity: BS 6500 and BS 7919. Minimum bending radius: 6 x diameter.



code	per m	price
TOL3040	per m	£1.98
TOL3040D	100m	£149.98

## Bell Wire

We stock this cable mainly for use with the pyrotechnic detonators. It is a twin core 0.5 mm Ø flexible copper wire with a 3.2 mm Ø thick PVC sheath. Supplied on a 100 m drum.



code	100 m drum	price
TOL218X		£18.25

## Manual Ranging Digital Multimeter

Compact, pocket- size digital multimeter. Positive click action rotary selection switch for ease of use. Multifunction measurement capability and overload protection.

- 22 mm LCD display with large digits and function indicator
- Auto Polarity indication
- Supplied with 2 test leads and battery



code	price
TOLDM830D	£22.75

## Wera Voltage Tester

A tough insulated screwdriver/ mains circuit tester with many other uses such as tracking cables. Voltage tested from 150 - 250 V.



code	length	tip width	price
WER005655	70mm	3.5mm	£7.71

## Cable Ties

Self-extinguishing nylon 6.6. Working temperature from -40° to +85°. Available in black and natural. Remarkable value.



code	Colour	length	width	qty	price	10+
GEN233	black	100mm	2.5mm	100	£0.64	£0.45
GEN232	black	200mm	4.8mm	100	£1.95	£1.55
GEN231	black	300mm	4.8mm	100	£3.80	£2.85
GEN234	black	370mm	7.6mm	100	£8.76	£6.30
GEN235	black	780mm	9mm	100	£19.60	£17.85
GEN233N	natural	100mm	2.5mm	100	£0.64	£0.45
GEN232N	natural	200mm	4.8mm	100	£1.95	£1.55
GEN231N	natural	300mm	4.8mm	100	£3.80	£2.85
GEN234N	natural	370mm	7.6mm	100	£8.76	£6.30
GEN235N	natural	780mm	9mm	100	£19.60	£17.85

## Releasable Cable Ties

Finger latch to release for re-use. Each pack contains 100 cable ties. Black.



code	Colour	length	width	qty	price	10+
GEN232R	Black	200mm	4.8mm	100	£3.85	£3.50
GEN234R	Black	370mm	7.6mm	100	£8.35	£7.50

## Wrap Back Ties

Fed up with nylon cable ties blocking stage tracks? Fed up with cutting your hands on the sharp edges left from nylon ties or with peeling sticky tape from your shoes? Why not try our wrap back ties. They have a hook-and-loop fastener which is repositionable, reusable, and more environmentally sound. They are kinder on the cables [especially data and fibre optic cables] and hands. Also useful for tidying air hoses, extension leads and hemp lines. Flints has these made in two useful sizes: Small – ideal for fixing cables to flying bars. Large – Ideal for tidying hoses etc. Black.



code	description	Colour	length	width	price
GEN241	Small size	Black	300mm	25mm	£4.60
GEN242	Large size	Black	400mm	25mm	£4.60

## One Wrap

This is one of the most useful products in the catalogue. It is a hook-and-loop fastener that is double sided so it will stick to itself. Cut it to any length to make reusable cable ties. Use it around folded cloths, sorting extension leads etc. Available on rolls or by the metre. Amazingly useful. Black.



width	code	per m	code	per 25 m
16mm	GEN244	£1.70	GEN244D	£34.03
20mm	GEN245	£1.96	GEN245D	£40.08
25mm	GEN246	£2.17	GEN246D	£48.14
50mm	GEN248	£3.63	GEN248D	£88.22

**MultiHook**

Back by popular demand, only this time, it's orange! The tough scaffold-sized locking hook secures the attachment and swivels on the end of an adjustable and re-usable heavy duty cable tie. The end of the tie releases at the neck so it can be passed through items. With a thousand uses MultiHooks hook up cables, ropes and hoses and also provide hanging hooks from bars and pipes. Made from UV resistant Nylon 66.



code	length	price
ERG33403	400mm	£4.46

**Extension Lead**

2 metre, 4 way extension lead with surge protection.



code	price
ELE4WAYEX	£12.50

**Black 13 A Permaplug**

The perfect tough plug for making up extension leads.



code	price
ELEHDPT13B	£1.98

**Black 15 A Permaplug**

Round Pin with no fuse for theatre lighting circuits.



code	price
ELEHDPT15B	£1.82

**Black Permaplug Trailing Sockets**

The perfect selection of tough sockets for making up extension leads. See page 369 for tough rubber sheathed cable.



code	Type	price
ELES130B	Single	£2.39
ELES132B	Double	£4.08
ELES134B	4-way	£7.19
ELES150B	single 15 A [round pin]	£1.94

**Vario Cable Reel**

Heavy-duty reels are unsuitable for use up ladders and ladders so we have selected this triple-socketed 15 m lightweight unit to take power up in the air. It is fitted with a hanging hook to clip onto the ladder rung. 240 V/13 A with thermal cut out protection against overheating and overloading and self-closing socket covers for reducing contamination from dust and debris.



code	price
ELE1094203	£18.15

**Industrial Cable Reel**

Fitted with a triple socket outlet with self-closing covers and a duo safety system against overheating and accidental restart. The frame is exceptionally stable, made from galvanised steel tube and tough plastic reel.

With cable clip to secure the plug end and Cable runs through the ergonomic handle for tidy rewinding and plug clips to reel via a cable grip to keep it out of the way. 240 V/13 A



code	price
ELE1208063	£69.95

**Fuses**

code	Type	price
TOL3036	5 A Fuse	£0.43
TOL3037	13 A Fuse	£0.44
FHSPOLYFUSE	Polycutter Fuse	£1.50

**Weller Gas Soldering Iron**

For when mains power is not available. The tool can be used for soldering, as a hot air nozzle, and with an open flame. Operating time of 30 minutes. Features Piezo automatic ignition and gas capacity display. Gas not supplied. Supplied in a sturdy storage box with: solder [lead-free, 1.0 mm Ø, 15 g]; cleaning sponge; 3 soldering tips: conical 1 mm, UND 2.4 mm, chisel-shaped 2.4 mm; plus a "Hot Knife" heat shrinking tip.

SPECIFICATION: Max Temperature: soldering tip/up to 450° C; hot air nozzle/up to 450° C; open flame/up to 1,300° C.

Supplied in a sturdy storage box with: solder [lead-free, 1.0 mm Ø, 15 g]; cleaning sponge; 3 soldering tips: conical 1 mm, UND 2.4 mm, chisel-shaped 2.4 mm; plus a "Hot Knife" heat shrinking tip.

code	description	price
WELPGRI	Gas for above	£6.75
WELKH6	Weller Bench Holder and Sponge	£38.50



**Bessey Cable Cutter D49**

Although these handy snips are designed for electricians we have found them brilliant for cutting small cords, ropes and bungee up to about 8 mm diameter.

- ✓ Cuts multi-core cables up to 10 mm diameter
- ✓ Stainless steel blades stay sharp
- ✓ Lightweight for less hand fatigue
- ✓ Rounded blade for safety
- ✓ Ergonomic handles with soft cushion inserts for comfort and grip
- ✓ One-handed thumb locking latch
- ✓ Recoil spring returns cutter to open
- ✗ Not insulated



code	price
TOLBE301031	£19.85

**Klein-Kurve®**

Strips No 10 – 18 AWG solid and No 12 – 20 AWG stranded copper wire.

- ✓ Easy-to-read markings on both sides
- ✓ Curved handles help in confined areas
- ✓ Wire looping and bending holes
- ✓ Coil spring for fast self-opening action
- ✓ Precision ground stripping holes
- ✓ Double-dipped comfort grips
- ✓ Screw shearing holes
- ✓ Gripping serrated nose for bending, shaping, and pulling of wire
- ✓ Handy closure lock for convenient storage
- ✓ Precision shear type cutting blades for easier cutting
- ✗ Not suitable for cutting steel wire
- ✗ Not insulated



code	price
TOL11055	£25.55

**Ratchet Crimper**

Powerful ratchet for consistent crimping of red [No. 22 – 16 AWG], blue [No. 16 – 14 AWG] and yellow [No. 12 – 10 AWG] insulated terminals.

code	description	price
TOL20835	Ratchet Crimper [red, blue and yellow]	£9.09

**Klein Katapult®**

Cuts and strips from No.8 – 22 AWG solid and No.10 – 22 AWG stranded wire.

- ✓ Removes up to 1" [25 mm] in length of the insulation layer in a single step
- ✓ Tension loaded wire grip gently holds wire while retaining the wire geometry
- ✓ Precision machined stripping holes
- ✓ Wire is automatically gripped and stripped with the same motion
- ✓ Two activations are needed for clear nylon jacket conductors
- ✓ Supplied with adjustable wire stop as standard feature, to assure uniform, precise strip length
- ✓ Cast alloy chassis with heavy-duty Ecoat finish for corrosion resistance and durability
- ✗ Not insulated



code	price
KLE11063W	£35.00

**Klein Adjustable Wire Stripper**

Strips No. 12 – 24 AWG solid and stranded wire. Simply set wire gauge dial with desired wire size for fast, easy stripping.

- ✓ Adjustable tool makes short work of cutting and stripping operations
  - ✓ Finely honed nose cutter easily gets into tight spaces
  - ✗ Not insulated
- For Tool Pouches see pages 348-350.



code	price
KLE74007	£11.95

**King Dick 1-for-6**

A terrible name but a revolutionary breakthrough in screwdriver technology. This screwdriver features a patented tip design that allows precise and powerful contact with ALL SIX PZP & Phillips screwhead sizes! Available in standard heavy-duty and insulated VDE tested to 1,000 V. The blade is made from high grade hardened steel with a 6 mm hex shaft and a 10 mm hex bolster for application of extra torque. The soft feel handle gives a powerful and comfortable grip. We've been told a Fender Stratocaster can be entirely dismantled with just one of these screwdrivers! 100 mm shaft.

code	description	price
TOL14610	Standard heavy-duty	£7.25
TOLINS14610	King Dick 1-for-6 [Insulated VDE to 1,000 V]	£7.95





Flints do not supply theatre lanterns which we prefer to leave to the various excellent specialist companies. The items listed here are those accessory items often used by props and stage as well as lighting departments. Visit [flints.co.uk](http://flints.co.uk) to see the colours

## About Lighting Gels

Filters were originally made from gelatin [hence "gels"] but by the 1950s Strand had developed acetate filters. Nowadays, there are two raw materials used in making colour filters, polycarbonate and polyester.

Polycarbonate is the material able to endure the highest heat and is liable to give the longest possible life.

There are two fundamental ways of manufacturing filters. The cheapest way is for the manufacturer to buy clear polyester film and to dye it on one or both surfaces. You can tell a film that is made this way because the colour can be removed by wiping the surface with a solvent or by scratching it. In most cases, it will be a perfectly serviceable filter but a problem will arise if you use it in colour scrollers. This is because during the manufacturing process the film is extruded thick and then stretched and rolled to produce the final thickness. This process puts a linear orientation into the film that causes it to shrink in width when heated. It will be prone to failure in colour scrollers.

The best filters are produced from pellets of the raw material that are deep dyed then extruded to the correct thickness and finally coated with a clear film on each side. Supergel is the only filter made this way.

Lee Filters reference numbers were developed by Fred Benthams of Strand. The numbering system was widely adopted in Europe. Rosco E-Colours were developed using surface-coated polyester to match these European numbers.



## Supergel

Rosco Supergel is uniquely made from deep dyed pellets of polycarbonate extruded to the exact thickness and coated on either side with a microscopic clear film. It will not distort under heat and is ideal for colour Scrollers. Polycarbonate filter will last longer than polyester [Lee and E-Colour] and has better fire resistance. It will comply with virtually all fire regulations [DIN4102, B1, M1 etc.]. There are over 130 colours and 30 diffusion materials. Sadly Rosco no longer provide swatchbooks Free of Charge. When ordering use the codes below replacing the XXX with the gel number.

code	description	price
ROS103R.XXX	Roll [7.62 m x 610 mm]	£130.00
ROS103S.XXX	Sheet [500 mm x 610 mm]	£9.80
ROSB07	Swatch book	£9.95

## E-colour+

A surface-coated polyester film. The colours match the original Strand numbers with the addition of around 30 extra shades. 40 of the E-colours are coated on both sides due to the dye type but otherwise they are coated on one side. Sadly Rosco no longer provide swatchbooks free of charge. When ordering use the codes below replacing the XXX with the gel number from the swatch book.

Flints can also supply Cinegel colour correction filter and CalColor.

code	description	price
ROS062R.XXX	Roll [7.62 m x 610 mm]	£122.00
ROS062FS.XXX	Full sheet [530 mm x 1.22 m]	£9.00
ROS062HS.XXX	Half sheet [530 x 610 mm]	£4.70
ROSB05	Swatch book	£9.95

## Matt Black Cinefoil

A specially coated matt black foil that soaks up light and is perfect for masking light leaks and eliminating reflections.



code	length	width	price
ROS360113	15.5m	304mm	£62.00
ROS360112	7.62m	610mm	£62.00
ROS360114	7.62m	1.22mm	£93.50

## Black Foil Tapes

Blacktak is a heat resisting matt black foil tape which can be used to mask off lamps and light leaks without leaving residue. Do not confuse with "Black Tack" the gungy, blobby tape [page 299]. We also stock unbranded matt black aluminium foil tape. For plain aluminium tape see page 298.



code	length	width	price
TAP071	25m	50mm	£21.84
TAP071MF	25m	50mm	£19.95

## Griplight

A heavy duty inspection lamp with spring loaded 50 mm plastic grip handle. Glass bulb protector and wire basket. Supplied with an 800 lumen low energy 10W LED light bulb (equivalent to 60 watt incandescent lightbulb). Replacement bulb also available. Cable length: 5 m



code	description	price
ELEGRIPL	Griplight	£26.59
ELEGRIPLBULB	Spare Bulb	£3.98

## LED Rechargeable Work Light

LED Inspection Torch that can be charged via USB or the integrated hand crank dynamo.

The USB charging would be preferable as it takes approximately 50 revolutions of the crank for 5 mins of charge but a useful option when you're in a bind. Features a magnet on the base for position on metal surfaces for hook it up with its 360 degree swivel hook. The Torch has 6 super bright LED's that have a 9 hour burn time and an output of 300 lumens. Time taken for full charge: 4 hrs Torch duration on full charge: 9 hrs Protected to IP20



code	price
ELE11785901	£23.85



## Non-LED Ultraviolet Floodlight

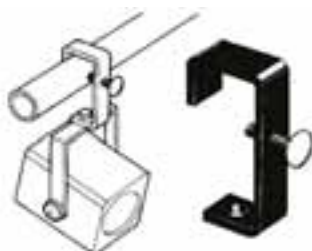
Stocked mainly to assist scenic artists while they paint, this new UV Floodlight is compatible with the Invisible UV Paints [page 32] and Flints Fluorescent Powders [page 32] producing a good effect with accurate colours. 2-year guarantee. SPECIFICATION: 240 V/ 400 W. Dimensions: 490 x 270 x 150 mm. Weight: 8.58 kg.

code	description	price
ELE80319K	Floodlight 400 c/w Bulb	£178.48
ELE82485	Spare E40 Bulb	£42.09

## HOOK CLAMPS

### Standard Hook Clamps

Our standard satin black hook clamp is great value! For Wing Bolt Spanners see page 342. Also check out the Doughty Space Saver on page 374.



code	Type	Finish	SWL	price
FHS040HC	Standard 50mm	Satin Black	40kg	£8.47
DOU20100	Standard 50mm	BZP	40kg	£6.88
DOU20102	Medium 50mm	BZP	100kg	£6.99
DOU20400	Heavy-Duty 50mm	BZP	150kg	£11.53
DOU20401	Heavy-Duty 50mm	Satin Black	150kg	£13.34
DOU20200	Standard 30mm	BZP	15kg	£6.58

### Truss Hook Clamp

A capture clamp plate prevents damage to thin wall aluminium truss. Fits 50 mm tube.



code	Finish	SWL	price
DOU21800	BZP	40kg	£10.67
DOU21801	Black	40kg	£13.20

### Universal Hook Clamp

Fits tubes from 20 – 0 mm diameter.



code	Finish	SWL	price
DOU21101	Black	40kg	£9.99

### Twenty Clamp

The Twenty Clamp is an aluminium pressure die cast clamp designed to suspend luminaires up to 20 kg. This clamp can be secured to tubes with a diameter of 48 – 51 mm with just two turns of the Doughty Knob. Luminaires are secured via a captive M10 or M12 Bolt [M10 supplied]. Damage to tubes and trussing is eliminated by using an extruded trigger. This product is fully TUV Approved. Design Registered. SPECIFICATION: Tube diameter: 48 – 51 mm. Width: 28 mm. Overall height: 100 mm. Weight: 280 g.



code	SWL	price
DOU58400	20kg	£15.91

### “Hook” Clamp

Very popular high tensile aluminium clamps widely used for attaching scenery as well as lanterns to bars and trussing. Suited to large and heavy luminaires.



code	description	SWL	price
DOU57200	Fitted with M12 x 50 mm bolt	750kg	£33.04
DOU57201	Black version	750kg	£39.26
DOU58105	Fitted with M12 x 50 mm bolt	500kg	£28.68
DOU58106	Black version	500kg	£33.15

### Triple E Hook Clamp

Designed primarily for the rapid attaching of Triple E tab tracks to truss or flying bars from 38 – 52 mm but equally suitable for attaching lanterns. Fitted with M12 x 50 mm bolt. Width: 30 mm. Weight: 578 g



code	SWL	price
EEETRA14	100kg	£40.00

### Quick Trigger Clamp

This clamp is the basis of all the Quick Trigger Clamps. A large Easygrip handle is fitted for ease of use. An extremely useful clamp for hanging valuable luminaires safely and easily. SPECIFICATION: Tube Ø: 38 – 51 mm. Width: 50 mm. Fixings: M12 Hole. Weight: 760 g.



code	SWL	price
DOU58201	250kg	£38.80

### Slimline Quick Trigger Clamp

This clamp is the basis of all the Slimline Quick Trigger Clamps. A large Easygrip handle is fitted for ease of use. An extremely useful clamp for hanging valuable luminaires safely and easily. SPECIFICATION: Tube Ø: 38 – 51 mm. Width: 30 mm. Fixings: M12 Hole. Weight: 490 g.



code	SWL	price
DOU58301	100kg	£36.20

## Double Ended Hook Clamp 90° Twist

Hangs a bar at right angles to the primary bar.

code	SWL	centre size	price
DOU21700	40kg	300mm	£15.08



## Double Ended Hook Clamp Parallel

Under-hangs a bar directly under the primary bar. BZP finish.

code	SWL	centre size	price
DOU20500	40kg	150mm	£12.96
DOU20700	40kg	150mm	£13.72
DOU20710	40kg	600mm	£15.43



## Boom Arm 48 mm Ø Tube

A length of 48 mm Ø alloy tube welded to an aluminium coupler.

Note: Max load is when used on a vertical bar. On a horizontal bar the arms will rotate at around 8 kg.

code	Finish	length	max load	price
DOU57310	self-colour	250mm	100kg	£58.71
DOU57311	satin black	250mm	100kg	£62.50
DOU57315	self-colour	500mm	75kg	£65.51
DOU57316	satin black	500mm	75kg	£70.47
DOU57320	self-colour	1m	25kg	£72.76
DOU57321	satin black	1m	25kg	£77.75



## Standard Boom Arm 90° Twist

Designed to hold a light to a vertical rigging pipe. Features a 90° twist.

code	description	price
DOU30500	Standard Boom Arm	£13.83



## Straight Boom Arm

Designed to hold a light to a horizontal rigging pipe.

code	description	price
DOU30600	Straight Boom Arm	£13.83
DOU30601	Straight Boom Arm [black]	£18.81

## Poly Board Holder

The best-looking Poly Board Holder in smart black powder-coated steel. Floor standing. Takes a 50 mm sheet but extend their usefulness by having one side a sheet of our 25 mm white FR polystyrene and the other side a sheet of our 25 mm black FR polystyrene [find the range on page 114] – white for a soft light, black to create harsh shadows for sculpting. With four non-marking plastic stand off feet.

Dims L x W x H: 457 mm x 216 mm x 267 mm.



code	weight	takes sheet size	price
DOUG1147	1.75kg	50mm	£51.43

## Manfrotto Super Clamps

Very versatile and clever clamps that will grip from 55 mm Ø right down to 13 mm Ø! Supplied with a wedge to square off the jaws for fastening to flat surfaces. Available as single or fixed double. The stud will allow rapid connection of trunnion arms etc.



Wedge lives here while not in use.

code	description	weight	WLL	price
MAN035	Single	410g	15kg	£32.83
MAN038	Double	830g	15kg	£69.28
MAN174	Hex lighting stud [M10]	16mm	15kg	£15.96

## Doughty Space Saver

Both Barry and Ben were extremely impressed with this little gadget. The Space Saver allows a permanent connection of a clamp or spigot to the lamp or projector, without compromising on storage capability, as it allows the fixing to fold away. Really neat. top section has a channel to hold captive an M10 Hex nut or bolt. Bottom is machined to accept an M10 socket cap bolt and allows free orientation.



code	weight	WLL	price
DOUT85850	100g	100kg	£35.67



## Spigots

We have a huge array of spigot options- many of which are listed here, but for images and technical details you'll need to visit our website: [www.flints.co.uk](http://www.flints.co.uk).

code	description	price
DOUT73000	M10 TV Spigot [Steel] [Euro Spec]	£26.74
DOUT73100	M12 TV Spigot [Steel] [Euro Spec]	£26.74
DOUT73350	M10 Female 16 mm Spigot [Aluminium]	£8.45
DOUT73360	M12 Female 16 mm Spigot [Aluminium]	£8.45
DOUT73391	M6 Female 16 mm Beamer Spigot [Aluminium]	£4.71
DOUT73390	M10 Female 16 mm Beamer Spigot [Aluminium]	£4.71
DOUT73392	M12 Female 16 mm Beamer Spigot [Aluminium]	£4.71
DOUT73800	Reducer Spigot 29 - 16 mm	£23.49
DOUT73900	16 mm Mini Spigot	£5.65
DOUT74000	TV-Standard Adaptor 29 - 19mm	£5.85
DOUT74100	TV-Mini Adaptor 29 - 16mm	£5.85
DOUT74200	Roller Race TV Spigot [Euro Spec]	£98.80
DOUT74300	M10 Female TV Spigot [Steel] [Euro Spec]	£21.88
DOUT74301	M12 Female TV Spigot [Steel] [Euro Spec]	£21.88
DOUT74305	M6 Female TV Spigot [Aluminium] [Euro Spec]	£21.88
DOUT74302	M10 Female TV Spigot [Aluminium] [Euro Spec]	£21.88
DOUT74303	M12 Female TV Spigot [Aluminium] [Euro Spec]	£21.88
DOUT74307	M10 Steel Reducer Spigot 28 x 16 mm	£21.88
DOUT74308	M12 Steel Reducer Spigot 28 x 16 mm	£21.88
DOUT74400	35 mm Speaker Spigot	£28.67
DOUT74402	35 mm Speaker Spigot Mount M12	£13.87
DOUT74500	M12 Female TV Spigot [Aluminium] [Long Shank Euro]	£21.88
DOUT74700	M10 Female TV Spigot [Steel] [Long Shank Euro]	£21.88
DOUT74705	M10 Female TV Spigot [Aluminium] [Long Shank Euro]	£21.88
DOUT74710	M12 Female TV Spigot [Steel] [Long Shank Euro]	£21.88
DOUT74800	TV Quick Receiver	£54.93
DOUT74801	TV Quick Receiver [Black]	£54.93
DOUG1003	Socket Adaptor 16 x 16 mm	£43.91
DOUG1002	Socket Adaptor 29 x 16 mm	£46.79
DOUG1190	Spigot 29 x 16 mm Lighting [Steel]	£24.42
DOUG1191	Spigot 29 x 16 mm Lighting [Aluminium]	£23.12



## Truss Spigot Pins & R Clips

To the untrained eye these simply look like closed retaining pins, however they are the specified standard clips for the most popular Truss spigot pins. Used to secure the spigot pin into position which is in turn used to secure the coupler and truss together.

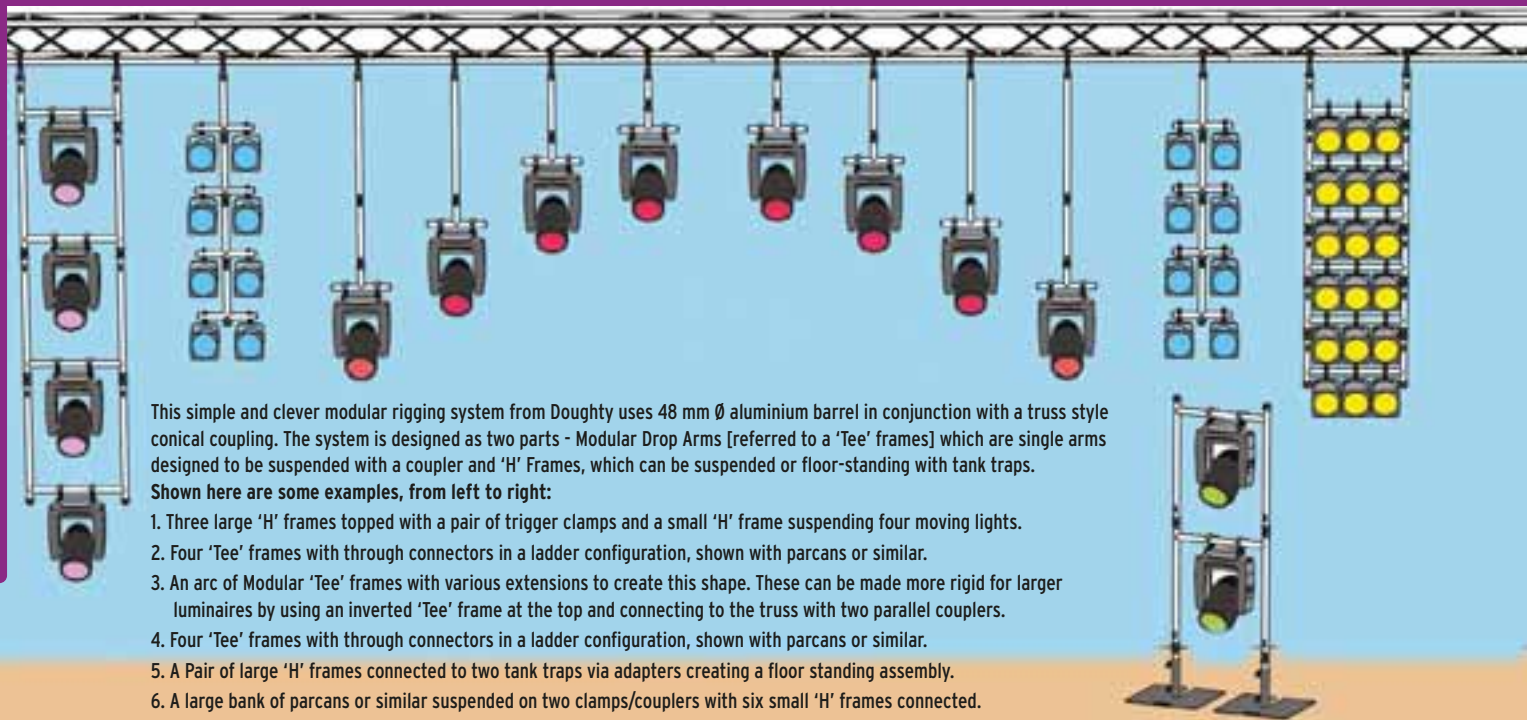
code	description	price
TSCCS6605	R Clip for 67 mm Spigot pin	£0.88
TSCCS7705	R Clip for 92 mm Spigot pin	£3.90
TSCCS6603	67 mm Spigot pin	£2.61
TSCCS7703	92 mm Spigot pin	£7.90
TSCCS66K	67 mm Spigot pin with R Clip	£2.98
TSCCS77K	92 mm Spigot pin with R Clip	£9.85



**VISIT FLINTS.CO.UK**  
To see lots more spigots!



# DOUGHTY MODULAR RIGGING



This simple and clever modular rigging system from Doughty uses 48 mm Ø aluminium barrel in conjunction with a truss style conical coupling. The system is designed as two parts - Modular Drop Arms [referred to a 'Tee' frames] which are single arms designed to be suspended with a coupler and 'H' Frames, which can be suspended or floor-standing with tank traps.

Shown here are some examples, from left to right:

1. Three large 'H' frames topped with a pair of trigger clamps and a small 'H' frame suspending four moving lights.
2. Four 'Tee' frames with through connectors in a ladder configuration, shown with parcans or similar.
3. An arc of Modular 'Tee' frames with various extensions to create this shape. These can be made more rigid for larger luminaires by using an inverted 'Tee' frame at the top and connecting to the truss with two parallel couplers.
4. Four 'Tee' frames with through connectors in a ladder configuration, shown with parcans or similar.
5. A Pair of large 'H' frames connected to two tank traps via adapters creating a floor standing assembly.
6. A large bank of parcans or similar suspended on two clamps/couplers with six small 'H' frames connected.

## Modular 'Tee' Frames

Available as a short version [220 - 250 mm], and a tall version [470 - 500 mm] which also has the option of a through connector style to allow the connection of another module below. All 450 mm wide and provided with tapered pins at connection points.



code	description	price
DOUT45760	Short	£92.60
DOUT45765	Tall	£97.24
DOUT45767	Tall with through Connector	£149.70
DOUT45761	Short	£92.60
DOUT45766	Tall	£97.24
DOUT45768	Tall with through Connector	£149.70

## Modular 'H' Frames

Available as a shorter version [220 - 250 mm] or a taller version [470 - 500 mm]. Both 450 mm wide and provided with tapered pins at connection points.



code	description	price
DOUT45900	Short	£231.50
DOUT45910	Tall	£262.34
DOUT45901	Short	£231.50
DOUT45911	Tall	£262.34
DOUT45775	250 mm	£111.35
DOUT45780	500 mm	£118.85
DOUT45785	1000 mm	£129.72
DOUT45790	2000 mm	£146.62
DOUT45776	250 mm	£111.35
DOUT45781	500 mm	£118.85
DOUT45786	1000 mm	£129.72
DOUT45791	2000 mm	£146.62
DOUT45795	adjustable 1.0 - 1.7 m	£249.08
DOUT45797	adjustable 2.0 - 3.7 m	£344.95
DOUT45796	adjustable 1.0 - 1.7 m	£249.08
DOUT45798	adjustable 2.0 - 3.7 m	£344.95

## Connector

Required to link each of the modular components. Tapered pins are supplied with each module, but spares also available. The half connector has an M12 internal thread for attachment via a bolt to a clamp or eye of your choice. We can supply a wide range of these connectors, see our website for further details. The Doughty Clamp version listed here has a SWL of 100 kg and weighs just 780 g.



Connector and Pin Half Connector



Safety Bond



Doughty Clamp



Tank Trap

code	description	price
DOUT45755	Connector	£15.75
DOUT45756	Spare pin	£6.97
DOUT45750	Half Connector M12 thread	£27.75
DOUT45801	Doughty Clamp	£54.02
DOUT45757	Tank Trap Adaptor Silver	£69.45
DOUT45758	Tank Trap Adaptor Black	£69.45
DOUT45855	Safety Bond Silver*	£22.45
DOUT45856	Safety Bond Black*	£22.45

\*with moving light hook

## Drop Arm with Stirrups

Designed to connect to the bottom of extension arms to create a hanging point for larger luminaires

code	price
DOUT45770	£91.35
DOUT45771	£91.35



## Front White

A highly opaque, reflective material for front projection. Best used where a bright image and wide viewing cone are required. Tough all-round screen, suitable for both full screen and full-frame soft-edge projections. Popular for cinemas. SPECIFICATION: Thickness: 0.3 mm, Gain [front]: 0.98, Seaming possible: YES, Material: PVC, Flame Retardancy: EN 13501-1 B-s3, d0, BS 5867, NFPA 701, Weight: 400 g/m<sup>2</sup>, Screen type: D. Full rolls can be supplied with a self adhesive backing to special order.

code	width	per linear metre
PRSC01	2m	£57.50

## Twin Creamy White

Designed for front or rear projection, whilst maintaining excellent brightness [though slightly reduced from the rear]. Wide viewing angles make this the most popular of screen materials. Particularly useful for projecting backdrops. SPECIFICATION: Thickness: 0.3 mm, Gain [front]: 0.77, Gain [rear]: 0.32, Seaming possible: YES, Material: PVC, Flame Retardancy: EN 13501-1 B-s3, d0, NFPA 701, Weight: 400 g/m<sup>2</sup>, Screen type: D / R. Full rolls can be supplied with a self adhesive backing to special order.

code	width	per linear metre
PRSC02	2m	£57.50

## Twin Black

Used in situations with high quantities of ambient light, has fine detail resolution when back lit with a strong image. Ideal for use when the screen needs to be inconspicuous until needed for projection, although it has a narrow field of view. SPECIFICATION: Thickness: 0.3 mm, Gain [front]: 0.14, Gain [rear]: 1.25, Seaming possible: YES, Material: PVC, Flame Retardancy: EN 13501-1 B-s3, d0, NFPA 701, Weight: 400 g/m<sup>2</sup>, Screen type: D / R. Full rolls can be supplied with a self adhesive backing to special order.

code	width	per linear metre
PRSC03	2m	£57.50

## Twin Grey

Highly resistant to scattered and ambient light whilst maintaining good light distribution, the high diffusion makes it ideal for blended projections. The image contrast may be lower than with other screens. SPECIFICATION: Thickness: 0.3 mm, Gain [front]: 0.31, Gain [rear]: 0.24, Seaming possible: YES, Material: PVC, Flame Retardancy: EN 13501-1 B-s3, d0, NFPA 701, Weight: 400 g/m<sup>2</sup>, Screen type: D / R. Full rolls can be supplied with a self adhesive backing to special order.

code	width	per linear metre
PRSC04	2m	£57.50

## HATO®Screen Black and White Projection Paint

Yes, that's right black projection paint! (It's also available in white). We were very impressed when we saw painted surfaces burst into life with colour-faithful projections. Sounds extravagant but this HATO® Screen Projection Paint turns wood, concrete and, as it's flexible, even textiles into a surface that will reproduce a very good image with uniform brightness. Excellent luminance – sends more light back than you throw into it – and image reproduction when seen from almost any angle. Preparation is everything: if brushed on it will show the brush marks so for best results prime and apply by spraying.

\*NB: The paint's metallic sheen makes it appear more dark anthracite rather than pitch black when put next to black surfaces. Water-based. For large areas we can also supply 12 L sizes, call us to discuss your project. Covers 6-8 m<sup>2</sup> per litre.



code	Colour	volume	price
PAT24002	Black [appears dark grey]	1L	£89.98
PAT24003	Black [appears dark grey]	5L	£355.31
PAT24001	White	1L	£89.98
PAT24004	White	5L	£355.31



Photo courtesy of Studio Hamburg – the back image is projected onto a sheet material painted with Black HATOScreen

# HEAD TORCHES

## HEADLAMP TORCHES

Essential kit for working backstage especially during lighting rehearsals. Frees up both hands allowing you to concentrate on the job and hang on to the ladder. The light source is close to your eyes ensuring the beam is thrown just where it is needed. Also handy for cycling home and outdoor pursuits. All our head torches are individually tested and have a three year guarantee.

Aria 1 Black RGB 350 Lumens Headlamp



Aria 1 Blk/Yell 350 Lumens Headlamp



Helmet Mounting Plate for ARIA Head Torch



### Petzl ARIA

Newly designed headtorch range from Petzl, bright head torches with a long battery life and impressive list of features for such lightweight, compact headlamps. Available in Black/Yellow ARIA 1 & 2 white light only or ARIA RGB 1 & 2 in Red/Green/Blue or White Light. See table below for performance comparison.

NEW

- Impact resistant to IK07
- Fall resistant up to 2 metres
- Dust proof & waterproof
- 3 lighting power levels: MAX BURN TIME (battery saver), STANDARD & MAX POWER
- Adjustable angle of beam
- Battery charge indicator
- Removable, washable head band that adjusts for perfect fit
- Can also be used with the SLOT ADAPT to clip directly to your helmet
- RGB versions have Red, Green or Blue lighting (continuous or strobe)

All black RGB torches are ideal for military use and theatre workers alike. These headlamps have red, green & blue light settings in addition to the standard white light. We're not sure how much use the coloured lights would be backstage, but we understand that the red light is good for maintaining night vision, red & green don't spook deer and blue is great for cutting through fog and detecting blood.....

SLOT ADAPT is a plate for mounting ARIA headlamps on a VERTEX or STRATO

ARIA 1: Lighting performance as defined by the the ANSI/PLATO FL1 Protocol				
Lighting Colour	Lighting Levels	Brightness	Distance	Burn Time
White	Max Burn Time	7lm	10m	110h
White	Standard	100lm	45m	12h [7h with core]
White	Max Power	350lm [450lm with core]	70m	2h

ARIA 2: Lighting performance as defined by the the ANSI/PLATO FL1 Protocol				
Lighting Colour	Lighting Levels	Brightness	Distance	Burn Time
White	Max Burn Time	7lm	10m	100h
White	Standard	100lm	60m	10h [7h with core]
White	Max Power	450lm [600lm with core]	100m	2h

ARIA 1 RGB: Lighting performance as defined by the the ANSI/PLATO FL1 Protocol				
Lighting Colour	Lighting Levels	Brightness	Distance	Burn Time
White	Max Burn Time	7lm	10m	110h
White	Standard	100lm	45m	12h [7h with core]
White	Max Power	350lm [450lm with core]	70m	2h
Red/Green/Blue	Continuous	4lm	5m	50h
Red/Green/Blue	Strobe	Visible at 700m for 300h		

ARIA 2 RGB: Lighting performance as defined by the the ANSI/PLATO FL1 Protocol				
Lighting Colour	Lighting Levels	Brightness	Distance	Burn Time
White	Max Burn Time	7lm	10m	100h
White	Standard	100lm	60m	10h [7h with core]
White	Max Power	450lm [600lm with core]	70m	2h
Red/Green/Blue	Continuous	4lm	5m	50h
Red/Green/Blue	Strobe	Visible at 700m for 300h		

code	description	price
PETE069AA00	Aria 1 Blk/Yell 350 Lumens Headlamp	£28.00
PETE069BA00	Aria 1 Black RGB 350 Lumens Headlamp	£32.00
PETE070AA00	Aria 1 Blk/Yell 450 Lumens Headlamp	£41.00
PETE070BA00	Aria 1 Black RGB 450 Lumens Headlamp	£44.00
PETE073BA00	Helmet Mounting Plate for ARIA Head Torch	£6.00



Pixa 450 Lumens  
Headlamp



## Petzl PIXA

Newly designed PIXA headlamp is now much more compact and but still the top of the Petzl headlamp range for function and durability. There are now 2 headlamps in the PIXA range standard PIXA which takes 3 x AAA batteries or CORE battery and PIXA R which takes a CORE PRO battery only.

NEW

- Impact resistant (IK08),
- Fall resistant (up to 2 meters)
- Crush resistant (up to 80 kg)
- Dustproof and waterproof in up to 2 meters of water for 1 hour (IP68)
- Resistant to certain chemicals
- CONSTANT LIGHTING technology means that the brightness of the lamp does not wane as the battery runs down.
- Wide, uniform beam for close-range work
- Two mixed beams for moving
- Focused beam for distance vision
- 10-second BOOST mode can be used at any time for the occasional need for maximum brightness
- Single rotating selector knob controls all functions and can be used while wearing gloves
- Plate allows you to tilt the lamp up or down
- Battery charge indicator allows the user to quickly see the battery level each time it is turned on or off
- PIXA R can be recharged without removing the battery, via three external charging contact points (charging cable included)
- CORE PRO battery is removable, so it can be recharged externally and switched out in order to continue working
- The SLOT ADAPT plate, included with the headlamp, makes it easy to install on a Petzl professional helmet with a slot

PIXA comes with three AAA/LR03 batteries.

PIXA R comes with its CORE PRO rechargeable battery (1250 mAh / 3.6 V / 4.5 Wh)

PIXA Lighting Performance

Lighting Technology	Lighting Modes	Beam Type	Brightness	Distance	Burn Time
Constant Lighting	Close-Range Work	Wide	35lm	10m	12h
Constant Lighting	Movement	Mixed	60lm	25m	6h
Constant Lighting	Rapid Movement	-	145lm	40m	2h
Constant Lighting	Distance Vision	Focussed	140lm	50m	-
Boost	-	Mixed	450lm	80m	10 seconds

PIXA R Lighting Performance

Lighting Technology	Lighting Modes	Beam Type	Brightness	Distance	Burn Time
Constant Lighting	Close-Range Work	Wide	45lm	15m	12h
Constant Lighting	Movement	Mixed	90lm	30m	6h
Constant Lighting	Rapid Movement	-	250lm	50m	2h
Constant Lighting	Distance Vision	Focussed	-	65m	-
Boost	-	Mixed	600lm	90m	10 seconds

code	description	price
PETE120AA00	Pixa 450 Lumens Headlamp	£53.00
PETE120CA00	Pixa R 600 Lumens Headlamp	£80.00
PETE131AA00	Charging Cable for Petzl CORE PRO	£14.50
PETE132AA00	CORE PRO Rechargeable Battery	£34.00

# HEAD TORCHES / HAND TORCHES



## Petzl E+Lite®

Ultralight and very compact, the e+LITE® emergency headlamp should always be with you. Ready to use in its neat storage case, it can be stored with its batteries for 10 years in a vest or an emergency kit, etc. Its white or red, continuous or strobe lighting allows you to be seen and to signal an emergency.

White close range work mode [15 lumens up to 6 m] allows you to move around easily in the dark.

For emergency situations, the red LED allows you to be seen from a distance [100 m for 15 hours, or in strobe mode 100 m for 70 hours].

Locking on/off switch designed to prevent accidental operation.

Resists extreme temperatures: -30 °C to +60 °C.

Waterproof up to a depth of 1 m for 30 minutes, IPX7. Operates on 2 lithium CR2032 batteries [included]. Certification: Certified CE, ATEX [Ex II 3 GD Ex in IIC T6, Ex tD A22, IP 68 T85°C].

code	weight including batteries	price
PETE02P4	26g	£24.00



## Petzl Tikkina®

An excellent everyday headlamp with a wide beam and three lighting modes. At maximum brightness [300 lumens] the headlamp has a range of 65 m and burns for 2 hours. Max burn time mode [7 lumens] has a range of 10 m and a burn time of 100 hours. Grey.

- Single push button for quick lighting mode selection
- Washable elastic headband that's easily adjusted
- Easy open battery case for fast battery changes

Water resistant for all-weather use IPX4. Battery compatibility: 3 x AAA/LR03 batteries [included] or CORE rechargeable battery [sold separately - see above]. Five-year guarantee.

code	weight including batteries	price
PETE060AA00	92g	£20.00

## Petzl Core Battery

Large capacity Li-Ion 1250 mAh rechargeable battery for use with the Tikkina® and the Tactikka®. Universal charging via the integrated USB port [cable included]. Charging indicator displayed on the battery.



code	price
PETE99ACA	£24.00

## HAND TORCHES

Hand torches have greatly improved in the last decade. With reliable LED technology it is possible to incorporate powerful beams into much smaller torches. However, LED technology isn't simple. We have tested torches that completely failed after relatively short periods, some LEDs cause radio interference, others start flickering. We hope that the ones we have listed will provide you with long-lasting and impressive service. Sadly, there is no magic involved. More Lumens means more energy and a shorter battery life, although improvements in batteries is helping here. You will need to decide when you are most likely to need a torch and what for. Sometimes a dull torch is better if you need to illuminate a working drawing, script or map as it will help to preserve your night vision. If you are on event security patrol a really powerful beam will help. You need to decide if you will carry it on your belt or in your pocket? Do you really need a strobe? Hopefully, you will find your perfect torch here.

### Ideal Small Inspection torch



#### LED Lenser® P4 Core

Slim pen like torch which is ideal for engineers and technicians made from aircraft grade aluminium. Water Resistant to IP54. Three power modes:

- Low Power – 15 lumens; 25 meters for 20 hrs;
  - Mid Power – 60 lumens; 55 meters for 9 hrs;
  - Standard Power – 120 lumens; 90 meters for 5 hrs
- Comes With: 2 x AAA Batteries & Pocket Clip

code	description	price
LEDP4C	P4BM	£25.00



#### LED Lenser® P5 Core Torch

Compact, Powerful Lightweight Torch with three power modes:

- Low Power – 15 lumens; 30 meters for 12 hrs
- Mid Power – 60 lumens; 60 meters for 5 hrs
- Standard Power – 150 lumens; 90 meters for 2.5 hrs

- Convenient pocket size and light weight
- One-handed on/off button. A really useful feature
- One-handed push speed focus
- Single AA battery. Keep a spare in your pocket, it is a better solution than having both go flat in the torch
- 140 lumens giving a stunning 120 m beam!
- Suitable for use down to -20°C
- Gold-plated contacts

Weight 83g. Water resistant to IP44

Supplied with: 1 x AA Battery & Wrist Strap

code	description	price
LEDP5C	P5 in belt pouch	£39.90



## LED Lenser® P7 Core Torch

Successor to the popular P7, the P7 Core has an advanced focusing system for efficient flood light and focused spot lighting. This compact torch easily slips into a jacket pocket yet the beam is as bright as many motorbikes. Water resistant to IP54.

3 power modes [time to 30% power]:

Low Power – 40 lumens; 100 meters for 25 hrs

Mid Power – 250 lumens; 220 meters for 2 hrs

Standard Power – 450 lumens; 300 meters for 1 hr

Batteries: 4 x AAA. Weight [with batteries]: 175 g.

Supplied with wrist strap and batteries.

code	price
LEDP7C	£59.95



## Mini Maglite® AA

The classic incandescent Maglite®. Under 6 inches long with an adjustable beam plus the unique "candle mode". Black.

Dimensions: 146 x 25.4 mm. Beam length: 96 m. Battery life: 5 h 15 min. Weight: 108 g.

Supplied with: 2 x AA batteries.

code	price
MAG0301	£18.53



## Mini Maglite® AA LED

The second generation Mini Maglite® with a multi-mode electronic switch which offers FOUR operating modes – high power, low power, blink and SOS.

- A powerful beam that focuses by rotating the head
- Balanced Optics™, combining a highly refined reflector with a quality LED, for a brilliant adjustable beam
- Intelligent Energy Source Management (patent pending) balancing high brightness with extended battery life
- "Candle Mode" – unscrew torch head, place head down on stable flat surface and set flashlight barrel into head

Batteries: 2 x AA. Dimensions: 168 x 25.4 mm. Beam length: 141 m.

Battery life: 10 h 45 min [31 h 30 min on low]. Weight: 118 g.

Supplied with: 2 x AA batteries and a nylon pouch.

code	price
MAG361LED	£37.70

## Nylon Holster for Mini Maglite® AA

Very popular Maglite® accessory. Full flap with a belt loop.



code	price
MAGAM2A051	£8.50



## Procell Alkaline & Lithium Batteries

The professionals' choice for hand torches and radio microphones. Great value, why not stock up now?



code	price	10+
DURAAAN	£0.39	£0.35
DURAAAN	£0.39	£0.35
DURCN	£0.98	£0.88
DURDN	£1.49	£1.34
DUR9VN	£1.49	£1.34
DURCR123N	£0.95	£0.85

## Coin Cell Batteries

Choose the Duracell Alkaline LR44 type to power the Faithfull Digital Calipers [page 315]. Both types sold in packs of two.



code	description	qty	price
DURCR2032	Spare Coin Cell battery CR2032	2 per pack	£1.95
DURLR44	LR44 [1.5 V Alkaline] pack of 2	2 per pack	£1.50