

/// PULSAR®

High Performance Apparel



COLLECTION
2019-2020

ABOUT US

QUALITY, RELIABILITY AND INNOVATION IS OUR BUSINESS

These are the foundations on which we have built the success of the PULSAR® brand. Focussing on the wearers of PULSAR® clothing, making sure they feel comfortable and ready to take on whatever the day will throw at them. Our distribution partners see PULSAR® as a trustworthy and fair company, supporting them to solve everyday challenges by working in close co-operation with each other.

Our team of technical garment specialists are ready to help and work out solutions to problems; solutions our design department translates into functional and attractive new clothing. These designs are then hand crafted at specially selected production facilities across the globe.

We continue to push the boundaries of innovation with our certified, technologically advanced products, ensuring the people who wear them can be confident in the knowledge they are protected from all elements and potential workplace hazards.

With the company trading since 1979 the core values of business such as partnership, reliability and mutual respect, continue to be passed down from generation to generation.



RISQS
RAILWAY INDUSTRY SUPPLIER

OUR CHARITY WORK

Railway Children

Railway Children are a brilliant charity that help and support street children in Africa, India and the UK. Since 1992 they have helped hundreds of thousands of vulnerable children, and we are delighted and proud to be working with them.

Rory the Robot

In 2014, the Rory the Robot Appeal was set up to help raise £1 million to get a state of the art Prostate Cancer surgical system installed in Worcestershire. So far, over £400,000 has been raised. It's a great cause that we are honoured to be involved with.



CONTENTS

HI-VISIBILITY COLLECTION

The Evolution Collection	6
7-in-1 Interactive Storm Coats	10
Breathable Coats & Jackets	14
Padded Coats & Jackets	18
Waterproof Over Trousers & Salopette	22
Waterproof Coveralls & Liner	24
Active LED Collection	26
Interactive Body Warmers	28
Interactive Soft Shell & Fleece Jackets	30
Combat Trousers & Work Belt	32
Combat Coveralls	34
Polo Shirts	36
Waistcoats & Accessories	40
Ladies Collection	42

FR-AST-ARC COLLECTION

PROTAL® Information	52
FR-AST-ARC Foul Weather Coat & Over Trouser	53
FR-AST-ARC Coverall & Trouser	54
FR-AST-ARC Polo Shirts & Sweat Shirt	58
FR Base Layers	61
FR-AST-ARC Base Layers	62
Navy FR-AST Polo Shirt, Sweat Shirt & Fleece	64

THERMAL COLLECTION

Blizzard Thermal Mens Collection	68
VILOFT® Information	69
Blizzard Thermal Ladies Collection	70
Blizzard Thermal Balaclavas	71

EN STANDARDS 72

TECHNOLOGY PARTNERS 74

SIZE GUIDE 75

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HI-VISIBILITY COLLECTION



PULSAR[®]

EVOLUTION

Pulsar[®] Evolution is an ultra-modern, high performance collection of high visibility apparel. Designed and engineered to offer incredible comfort, durability and protection, by utilising EVOTECH[™] 3-layer laminate fabric technology, 3M thermally applied reflective tapes and YKK zips.

HYDROPHOBIC WATERPROOF OUTER LAYER

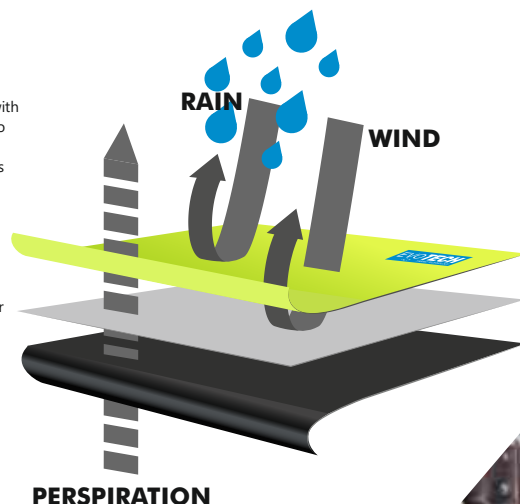
260T 100% HV polyester 2/2 twill with breathable PU laminate designed to keep out rain while remaining breathable in all weather conditions

BREATHABLE MEMBRANE MIDDLE LAYER

PU membrane physically stops water and wind, keeping the wearer warm and dry by also allowing moisture (perspiration) to escape

BREATHABLE LINER FABRIC

20 denier tricot knit polyester to protect the breathable membrane from being damaged



STAY DRY

13X

MORE WATERPROOF

EVOTECH[™] fabric is water resistant (waterproof) up to 13 times higher than the class 3 requirement of EN343.

TENSILE STRENGTH

10X

STRONGER

EVOTECH[™] Fabric has a tensile score of up to 10 times the standard. Tensile strength is the resistance of the fabric to breaking (being stretched/pulled) under tension.

BREATHE EASY

11.3 RET

Breathability measured in RET (Resistance of Evaporation of a Textile).

The lower the resistance (RET), the more breathable. A RET of 0 has excellent breathability whilst a RET of 40+ is not very breathable. To meet class 3 (the highest level) a fabric must score less than 20 RET.

TEAR RESISTANCE

3X

TOUGHER

EVOTECH[™] fabric is up to 3 times the required standard when it comes to tear resistance.



EVO100 | EVO250

PULSAR® Evolution Storm Coats**FEATURES & BENEFITS**

- Thermally applied 3M™ Scotchlite™ Reflective Tape with segmented comfort trim shoulder braces.
- PULSAR® reflective blue piping and chevron detail.
- YKK® 2-way zip concealed by double velcro storm flap.
- Neoprene inner cuff, underarm ventilation and chin guard.
- Two internal A4 sized poachers pockets.
- Interacts with PULSAR® Body Warmers (P422/PR498), Fleece Jackets (P507/PR508) and Soft Shell Jackets (P534/PR535).
- Suitable for use in the automotive industry (car safe).

Colour

EVO100 - Yellow

EVO250 - Orange

Fabric

EVOTECH™ 3 layer polyester laminate

Liner

100% polyester mesh lining

Sizes

XS - 6XL

Standards

EN ISO 20471 Class 3

EN343 Class 3:3

RIS 3279-TOM (EVO250)

**PULSAR® Evolution Hoods****Colour**

EVO102 - Yellow

EVO252 - Orange

Sizes

One Size



EVO101 | EVO251

PULSAR® Evolution Trousers**FEATURES & BENEFITS**

- Thermally applied 3M™ Scotchlite™ Reflective Tape with segmented comfort trim thigh band for improved abrasion resistance.
- PULSAR® reflective blue piping and chevron detail.
- Zip gusseted at hem of legs.
- Fully elasticated waistband with draw cord for a more secure fit.
- Combat style thigh pocket to each leg.
- Suitable for use in the automotive industry (car safe).

Colour

EVO101 - Yellow

EVO251 - Orange

Fabric

EVOTECH™ 3 layer polyester laminate

Sizes

XS - 6XL

Standards

EN ISO 20471 Class 2

EN343 Class 3:3

RIS 3279-TOM (EVO251)





P487

PULSAR® 7-in-1 Storm Coat

PRODUCT CONSISTS OF P421 STORM COAT & P422 BODY WARMER

Colour

Yellow

Sizes

XS - 7XL

FEATURES (P421 PULSAR® Unlined Storm Coat)

Please see page 15 for feature list.

Outer Fabric

300 denier PU coated polyester

Inner Fabric

100% polyester mesh lining

Standards

EN ISO 20471 Class 3

EN343 Class 3:3

FEATURES (P422 PULSAR® Interactive Body Warmer)

Please see page 28 for features.

Outer Fabric

300 denier PU coated polyester

Inner Fabric

Grey padded micro fibre lining

Standards

EN ISO 20471 Class 2





1 Storm Coat with sleeveless body warmer inside



2 Storm Coat



3 Sleeved Body Warmer



4 Sleeved Body Warmer Reversed



5 Sleeveless Body Warmer



6 Sleeveless Body Warmer Reversed

PR497

PULSAR® Rail Spec 7-in-1 Storm Coat

PRODUCT CONSISTS OF PR499 STORM COAT & PR498 BODY WARMER

Colour

Orange

Sizes

XS - 7XL

FEATURES (PR499 PULSAR® Rail Spec Unlined Storm Coat)

Please see page 15 for feature list.

Outer Fabric

300 denier PU coated polyester

Inner Fabric

100% polyester mesh lining

Standards

EN ISO 20471 Class 3

EN343 Class 3:3

RIS 3279-TOM

FEATURES (PR498 PULSAR® Rail Spec Interactive Body Warmer)

Please see page 28 for features.

Outer Fabric

300 denier PU coated polyester

Inner Fabric

Grey padded micro fibre lining

Standards

EN ISO 20471 Class 2

RIS 3279-TOM





1 Storm Coat with sleeveless body warmer inside



2 Storm Coat



3 Sleeved Body Warmer



4 Sleeved Body Warmer Reversed



5 Sleeveless Body Warmer



6 Sleeveless Body Warmer Reversed



BREATHABLE

COATS & JACKETS

The unlined **PULSAR®** storm coats and bomber jackets are waterproof and breathable to the highest level of EN343. Designed for optimal comfort with maximum performance in the harshest of weather conditions.

#VISIBLYSUPERIOR





P421 | PR499

PULSAR® Unlined Storm Coats

FEATURES & BENEFITS

- YKK® 2-way zip concealed by double velcro storm flap.
- Large external bellowed pockets with separate hand warmer pockets.
- Neoprene inner cuff, underarm ventilation and chin guard.
- Nordic design detachable lined hood.
- Micro-fleece collar, flip out ID window and water repellent zipped chest pocket.

Colour

P421 - Yellow

PR499 - Orange

Outer Fabric

300 denier PU breathable coated polyester

Inner Fabric

100% polyester mesh lining

Sizes

XS - 7XL

Standards

EN ISO 20471 Class 3

EN343 Class 3:3

RIS 3279-TOM (PR499)

Interactive

Storm Coat interacts with compatible PULSAR® inner garments:

P422 | PR498 | P534 | PR535 | P507 | PR508



P533 | PR515

PULSAR® Unlined Bomber Jackets**FEATURES & BENEFITS**

- YKK® zip concealed by double velcro storm flap.
- Large external bellowed pockets with separate hand warmer pockets.
- Elasticated adjustable storm cuffs.
- Underarm ventilation, chin guard & flip out ID window.
- Nordic design detachable lined hood.
- Micro-fleece collar.

Colour

P533 - Yellow

PR515 - Orange

Outer Fabric

300 denier PU breathable coated polyester

Inner Fabric

100% polyester mesh lining

Sizes

S - 6XL

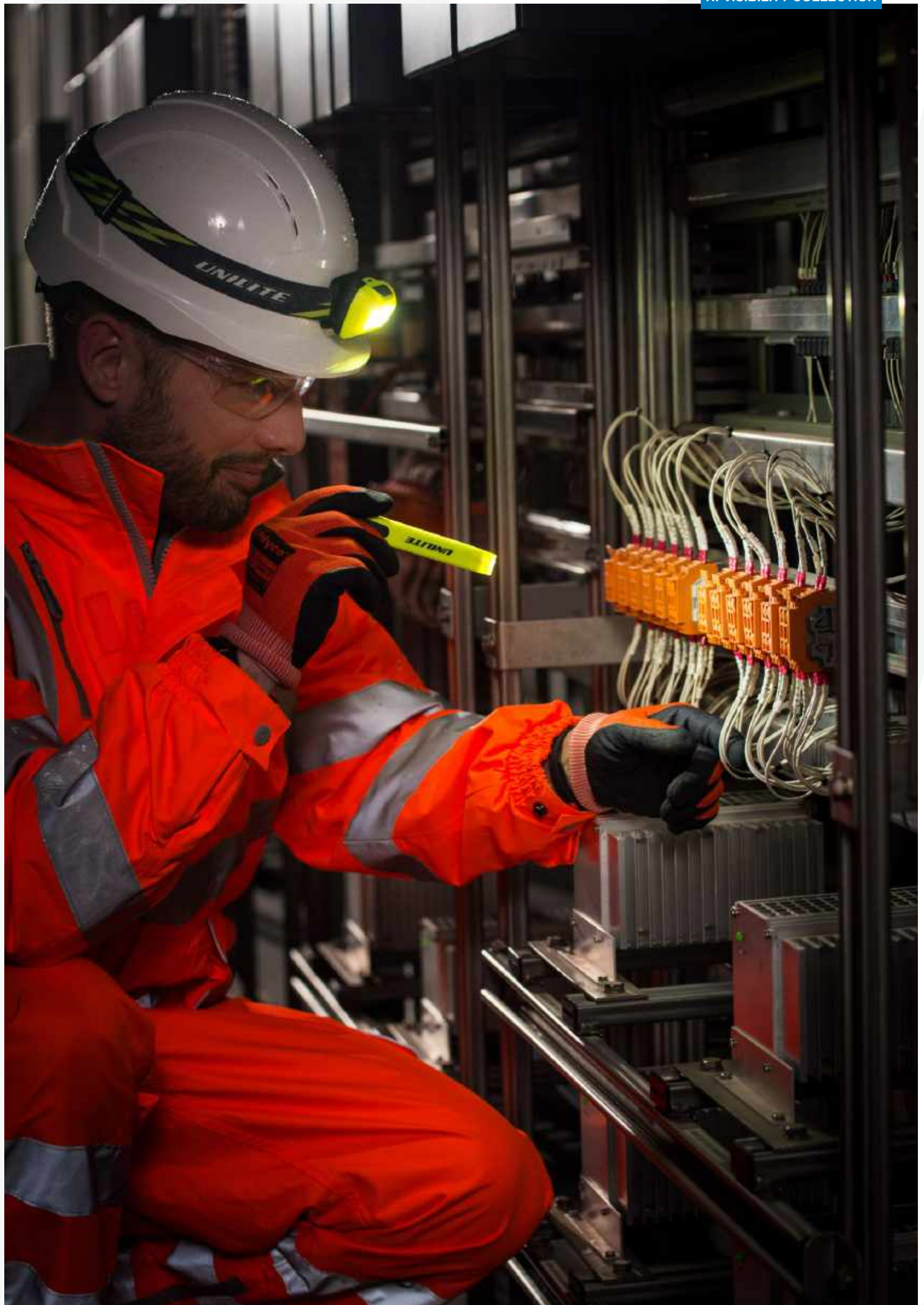
Standards

EN ISO 20471 Class 3

EN343 Class 3:3

RIS 3279-TOM (PR515)





PADDED COATS & JACKETS

The outer fabric used in the padded **PULSAR®** storm coats and bomber jackets is waterproof and breathable to the highest level of EN343, whilst the soft quilted thermal lining increases heat retention. Designed for optimal comfort with maximum performance in the harshest of weather conditions.

#VISIBLYSUPERIOR



P187 | PR502

PULSAR® Padded Storm Coats**FEATURES & BENEFITS**

- YKK® 2-way main zip concealed by double velcro storm flap.
- Large external bellowed pockets with separate hand warmer pockets.
- Neoprene inner cuff, underarm ventilation & chinguard.
- Nordic style detachable lined hood.
- Micro-fleece collar, flip-out ID window & water repellent zipped chest pocket.

Colour

P187 - Yellow

PR502 - Orange

Outer Fabric

300 denier breathable PU coated polyester

Inner Fabric

Grey soft touch micro-fibre padding

Sizes

S - 6XL

Standards

EN ISO 20471 Class 3

EN343 Class 3:1

RIS 3279-TOM (PR502)



P191 | PR496

PULSAR® Padded Bomber Jackets**FEATURES & BENEFITS**

- YKK® zip concealed by double velcro storm flap.
- Large external bellowed pockets with separate hand warmer pockets.
- Elasticated adjustable storm cuffs.
- Underarm ventilation, chin guard & flip out ID window.
- Nordic design detachable lined hood.
- Micro-fleece collar.

Colour

P191 - Yellow

PR496 - Orange

Outer Fabric

300 denier breathable PU coated polyester

Inner Fabric

Grey soft touch micro-fibre padding

Sizes

S - 6XL

Standards

EN ISO 20471 Class 3

EN343 Class 3:1

RIS 3279-TOM (PR496)





P206TRS | PR503TRS

PULSAR® Waterproof Over Trouser

FEATURES & BENEFITS

- 3 bands of reflective tape.
- Elasticated waistband and draw cord.
- Slit access hip pockets.
- Combat pockets on each thigh.
- Rear pocket with flap.
- Zip gussets at ankle.

Colour

P206TRS - Yellow

PR503TRS - Orange

Fabric

300 denier breathable PU coated polyester

Sizes

XS - 6XL in 29" Leg

XS - 7XL in 31" Leg

Standards

EN ISO 20471 Class 2

EN343 Class 3:3

RIS 3279-TOM (PR503TRS)



P521 | PR504

PULSAR® Waterproof Salopette

FEATURES & BENEFITS

- YKK® 2-way zip concealed by storm flap.
- Kneepad pockets (knee pads not included).
- Bellowed combat style thigh pockets to each leg.
- PULSAR® blue reflective elasticated shoulder braces with click lock quick release fastening.
- Zip gusseted at hem of legs.

Colour

P521 - Yellow

PR504 - Orange

Fabric

300 denier breathable PU coated polyester

Sizes

S - 4XL

Standards

EN ISO 20471 Class 2

EN343 Class 3:3

RIS 3279-TOM (PR504)

**NEW
ARRIVAL**







P522 | PR505

PULSAR® Waterproof Coverall

FEATURES & BENEFITS

- YKK® 2-way zip concealed by double velcro storm flap.
- Underarm ventilation and flip out ID window.
- Nordic design detachable style hood.
- Bellowed combat style thigh pockets.
- Elasticated waistband, microfleece collar and chin guard.
- Interactive zips to accommodate G100COV liner.

Colour

P522 - Yellow

PR505 - Orange

Fabric

300 denier breathable PU coated polyester

Liner

100% polyester mesh lining

Sizes

S - 4XL

Standards

EN ISO 20471 Class 3

EN343 Class 3:3

RIS 3279-TOM (PR505)



G100COV

PULSAR® Interactive Thinsulate™ Liner

FEATURES & BENEFITS

- 3M™ Thinsulate™ Insulation Type G100 quilting for maximum heat retention.
- YKK® interactive zip.
- Knitted cuffs & ankles for a more secure fit.

Colour

Grey

Fabric

3M™ Thinsulate quilting

Sizes

S - 4XL

Interactive

Interacts with compatible PULSAR® Waterproof Coveralls:

P522 | PR505



PROTECTIVE CLOTHING WITH **LED ACTIVE** TECHNOLOGY

A NIGHT AND DAY SOLUTION

Combines market leading **PULSAR®** hi-visibility reflective harness for daytime use and our new Active technology for use in poor visibility conditions. The Active LED system makes the **PULSAR®** Active garments ideally suited for road and underground workers, refuse collectors, roadside assistance engineers and anyone else working in variable light conditions.

MODE 1 SOFT FLASH

Slow intermittent flash giving up to 20 hours battery life

MODE 2 RAPID FLASH

Quicker flash giving up to 15 hours battery life

MODE 3 CONSTANT

Permanently on giving up to 10 hours battery life



BRIGHTNESS

26-32 watts output (2600 lumens) per LED, the equivalent of a 150 watt light bulb. Up to 20 years of life.



BATTERY INFO

Fully recharge from flat in 5 hours. Lithium-ion battery giving up to 5000 full recharges. Charged by mini USB (lead included).

FEATURING ICEid™

Each **PULSAR®** Active garment includes an ICEid™ ICE Tag. An "In Case of Emergency" tag contains a link to a persons secure and private emergency contact details and medical information which can be accessed by a first responder within seconds of any accident.



1. Attach the ICE Tag to your zip.

Simply unpack the tag and attach to an item of clothing.

2. Register your Tag online.

It takes a couple of minutes to register your tag and fill out your information.

3. Unique Alphanumeric & QR code

Each tag features unique alphanumeric and QR codes that can be scanned by first responders with a smart phone or entered into the ICE website to access the persons Emergency Contact Record.

ACT350

PULSAR® Active Harness**FEATURES & BENEFITS**

- 3 different light modes.
- Lithium-ion battery charges from flat in 5 hours (up to 5000 full charges).
- Charged by mini USB lead (included).
- ICEid ICE Tags included with each garment.
- Up to 20 hours of use from a full charge.
- Velcro adjustable shoulders & waist band for quick release.
- 11x intergrated LED's for maximum brightness.
- Grey mesh "spacer" padded inside.

Colour

Orange

Fabric

PU polyester

Liner

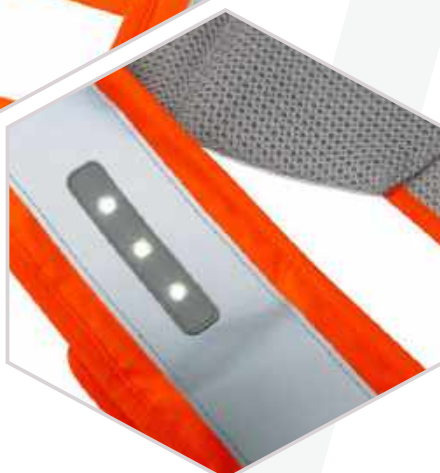
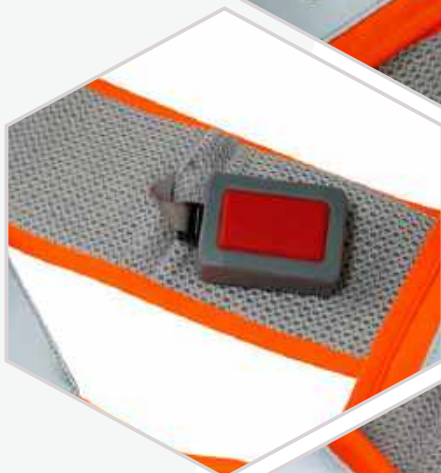
Grey mesh "spacer" fabric

Sizes

XS, S-L & XL-3XL

Standards

EN13356:2001



eLeksen
embedded

P422 | PR498

PULSAR® Interactive Body Warmer

FEATURES & BENEFITS

- YKK® Interactive zip fastening.
- Detachable sleeves with knitted cotton cuffs.
- Reverses to grey soft touch micro fibre padding.
- Anchorage fastening points at cuffs and neck.
- Longer scalloped back length.

Colour

P422 - Yellow
PR498 - Orange

Fabric

300 denier breathable PU coated polyester

Liner & Sleeves

Grey soft touch micro-fibre padding (reversible)

Sizes

XS - 7XL

Standards

EN ISO 20471 Class 2
RIS 3279-TOM (PR498)

Interactive

Interacts with compatible PULSAR® Storm Coats:
P421 | PR499 | EVO100 | EVO250



P524 | PR525

PULSAR® Interactive Sleeves

Colour

P524 - Yellow
PR525 - Orange

Fabric

300 denier breathable PU coated polyester

Liner

Grey soft touch micro-fibre lining (reversible)

Sizes

S - 3XL

Interactive

Interacts with compatible PULSAR® Body Warmers:
P422 | PR498





P534 | PR535

PULSAR® Interactive Soft Shell Jacket**FEATURES & BENEFITS**

- Thermally applied chevron design reflective tape.
- YKK® interactive zip front fastening.
- Wrap around branded cuff adjusters.
- Anchorage fastening points at cuffs & neck.
- Suitable for use in the automotive industry (car safe).

Colour

P534 - Yellow

PR535 - Orange

Fabric

100% polyester stretchy soft shell

Liner

Micro fleece

Sizes

S - 6XL

Standards

EN ISO 20471 Class 3

RIS 3279-TOM (PR535)

Interactive

Interacts with compatible PULSAR® Storm Coats:

P421 | PR499 | EVO100 | EVO250



P507 | PR508

PULSAR® Interactive Polar Fleece Jacket**FEATURES & BENEFITS**

- Fixed polyester mesh lining wind breaker.
- YKK® interactive zip front fastening.
- 1 chest pocket and 2 lower hip pockets with zip closure.
- Elasticated cuffs and shock cord at waist.
- Anchorage fastening points at cuff and neck.

Colour

P507 - Yellow

PR508 - Orange

Fabric

300gsm 100% polyester double anti-pill

Sizes

XS - 7XL

Standards

EN ISO 20471 Class 3

RIS 3279-TOM (PR508)

Interactive

Interacts with compatible PULSAR® Storm Coats:

P421 | PR499 | EVO100 | EVO250





P346 | PR336 | P513REF

PULSAR® Combat Trousers

FEATURES & BENEFITS

- Double stitched reflective tape.
- Teflon® coating increases resistance to dirt & light showers.
- Triple stitched inseam and double stitched throughout.
- Knee pad pockets (knee pads not included).
- Partially elasticated waistband.
- Double press stud & button fastening with lockable zip fly.

Colour

P346 - Yellow
PR336 - Orange
P513REF - Navy

Fabric

275gsm 80% polyester, 20% cotton with twill finish

Sizes - P346 & PR336

28"-54" waist in Short Leg (29")
28"-54" waist in Regular Leg (31")
28"-54" waist in Tall Leg (33")

Sizes - P513REF

28"-50" waist in Short Leg (29")
28"-50" waist in Regular Leg (31")
28"-50" waist in Tall Leg (33")

Standards

EN ISO 20471 Class 2 (P346 & PR336)
RIS 3279-TOM (PR336)



P600

PULSAR® Work Belt

FEATURES & BENEFITS

- 40mm wide high tensile nylon webbing.
- Ultra tough zinc plated buckle with quick and easy lock/release mechanism.

Colour

Blue/Silver

Fabric

High tensile nylon webbing

Sizes

One Size - Suitable for up to 54" waist



P349 | PR339

PULSAR® Combat Coverall**FEATURES & BENEFITS**

- Teflon® coating increases resistance to dirt & light showers.
- Triple stitched inseam & double stitched throughout.
- Two lower hip pockets with slit access to under garments.
- Knee pad pockets (knee pads not included).
- YKK® 2-way zip front fastening with concealed studded storm flap.
- Suitable for use in the automotive industry (car safe).

Colour

P349 - Yellow

PR339 - Orange

Fabric

275gsm 80% polyester, 20% cotton with twill finish

Sizes

S - 4XL

Standards

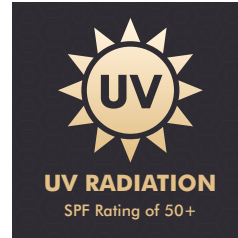
EN ISO 20471 Class 3

RIS 3279-TOM (PR339)





PROTECT YOUR SKIN



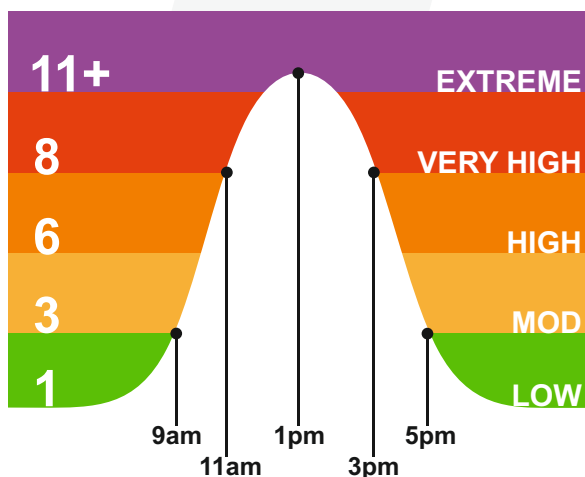
PULSAR® polo shirts have a built in Sun Protection Factor (SPF) rating of 50+ ensuring total protection from harmful UV rays throughout the day.

#VISIBLYSUPERIOR



UVI

Example of UV levels over a summers day



WHAT IS THE UV INDEX

Adopted by the World Health Organisation, the UV Index is an international scientific measure of the level of Ultraviolet radiation from the sun.

It tells you on a daily basis what the UV Index levels are and when the sun protection measures are required. The higher the level the greater the risk of skin damage.

YOU NEED TO BE PROTECTED AS SOON AS THE UV INDEX REACHES 3, NOT JUST WHEN THE SUN IS SHINING.



P175 | PR176

PULSAR® Polo Shirt**FEATURES & BENEFITS**

- Thermally applied stretchy reflective tape.
- Added moisture wicking treatment.
- SPF 50+ certified fabric.
- Extended back length.
- Underarm open mesh ventilation.
- Grey collar & cuffs with contrast tipping, plus grey inner placket.

Colour

P175 - Yellow

PR176 - Orange

Fabric

140gsm 100% polyester bird-eye knit with added wicking treatment

Sizes

S - 7XL

Standards

EN ISO 20471 Class 2

RIS 3279-TOM (PR176)



P458 | PR470

PULSAR® Long Sleeve Polo Shirt

FEATURES & BENEFITS

- Thermally applied stretchy reflective tape.
- Added moisture wicking treatment.
- SPF 50+ certified fabric.
- Extended back length.
- Underarm open mesh ventilation.
- Grey collar and cuffs with contrast tipping, plus grey inner placket.

Colour

P458 - Yellow

PR470 - Orange

Fabric

140gsm 100% polyester bird-eye knit with added wicking treatment

Sizes

XS - 7XL

Standards

EN ISO 20471 Class 3

RIS 3279-TOM (PR470)





P197 | P201

PULSAR® Waistcoats

FEATURES & BENEFITS

- Sew on reflective tape.
- Unique double pocket to right chest.
- Colour contrast bound edges.
- Zip front fastening ensures a secure fit at all times.
- Water repellent woven fabric.

Colour

Yellow

Fabric

Woven 150 denier, 100% polyester with water repellent finish

Sizes

P197 - M - 3XL

P201 - S - 6XL

Standards

P197 - EN471 Class 2

P201 - EN471 Class 3



PR145

PULSAR® Rail Spec Waistcoat

FEATURES & BENEFITS

- 'V' design reflective tape to front with vertical rear braces.
- Zip front fastening.
- Press studded anti-entanglement design.
- Elasticated at sides and rear for more precise fit.

Colour

Orange

Fabric

275gsm 80% polyester, 20% cotton with twill finish

Sizes

S - 7XL

Standards

EN ISO 20471 Class 2

RIS-3279



PR532

PULSAR® Rail Spec Back Back**FEATURES & BENEFITS**

- Reflexite® prismatic reflective tape.
- Quick release anti-entanglement mechanism.
- Padded base and rubber feet for extra stability.
- Heavily bar tacked shoulder straps.
- 35+ litre capacity.
- LED torch included.

Colour

Orange

Fabric

High abrasion waterproof Cordura®

Sizes

One Size





LADIES COLLECTION





P704 | PR705

PULSAR® Ladies Storm Coat**FEATURES & BENEFITS**

- Chevron design reflective tape.
- YKK® 2-way zip fastening concealed by double storm flap.
- Zipped underarm ventilation system.
- Nordic design detachable lined hood.
- Wrapped and velcro adjustable cuffs.
- Interacts with G80LDS internal liner.

Colour

P704 - Yellow

PR705 - Orange

Fabric

300 denier breathable PU coated polyester

Liner

100% polyester mesh lining

Sizes

8 - 26

Standards

EN ISO 20471 Class 3

EN343 Class 3:3

RIS 3279-TOM (PR705)

Interactive

Storm Coat interacts with PULSAR® Ladies Coat Liner G80LDS





G80LDS

PULSAR® Ladies Coat Liner

FEATURES & BENEFITS

- Diamond quilt design.
- Cannot be worn as a stand alone garment.

Colour

Grey

Fabric

3M™ Thinsulate™ insulation with 100% polyester microfibre.

Sizes

8 - 26

Interactive

Liner interacts with compatible PULSAR® ladies coats.

P704 | PR705



P700 | PR701

PULSAR® Ladies Polo Shirt

Colour

P700 - Yellow
PR701 - Orange

Fabric

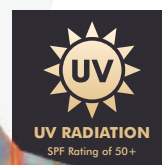
140gsm 100% polyester bird-eye knit with added wicking treatment

Sizes

8 - 26

Standards

EN ISO 20471 Class 2
RIS 3279-TOM (PR701)



FEATURES & BENEFITS

ALL POLO SHIRTS

- Thermally applied stretchy reflective tape.
- Added moisture wicking treatment.
- SPF 50+ certified fabric.
- Extended back length.
- Underarm open mesh ventilation.
- Grey collar and cuffs with contrast tipping, plus grey inner placket.

P702 | PR703

PULSAR® Ladies Long Sleeve Polo Shirt

Colour

P702 - Yellow
PR703 - Orange

Fabric

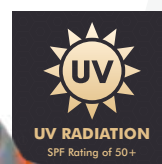
140gsm 100% polyester bird-eye knit with added wicking treatment

Sizes

8 - 26

Standards

EN ISO 20471 Class 2
RIS 3279-TOM (PR703)





P346LDS | PR336LDS

PULSAR® Ladies Combat Trousers

FEATURES & BENEFITS

- Double stitched reflective tape.
- Teflon® coating increases resistance to dirt & light showers.
- Triple stitched inseam & double stitched throughout.
- Knee pad pockets (knee pads not included).
- Partially elasticated waistband.
- Double press stud and button fastening lockable zip fly.

Colour

P346LDS - Yellow

PR336LDS - Orange

Fabric

275gsm 80% polyester, 20% cotton with twill finish

Sizes

8-26 in Short Leg (27")

8-26 in Regular Leg (29")

8-26 in Tall Leg (31")

Standards

EN ISO 20471 Class 2

RIS 3279-TOM (PR336LDS)







FR-AST-ARC COLLECTION



WHAT IS PROTAL®

Protal® is a new super high performance Protex Fibre blend, supplied by Waxman Fibres that is only available through their partnership chain, from spinning of fibre, through knitting & weaving, to finished garments, ultimately giving the wearer a consistency of compliance not available with many other FR fabrics.

WHAT IS AN ELECTRIC ARC FLASH

An arc flash is an undesired electric discharge that travels through the air between conductors or from a conductor to an earth. The resulting explosion may exceed 35,000 degrees Fahrenheit which is capable of vaporizing metal and sending a blast in all directions that can cause serious injuries and possible fatalities.

WHY CHOOSE PULSAR® FR-AST-ARC

The PULSAR® FR-AST-ARC range has been developed in partnership with Protal® in order to bring to market an innovative high performance range of protective layers. The range is suitable for a number of industries including Petro-chemical, utility, offshore, power & energy and has been designed to not only offer functionality and compliance, but to also maximise comfort for the wearer in increasingly tough environments.

PPE REGULATIONS 89/686/EEC ARTICLE 11B

We are independently audited and our systems accredited to the above, allowing us to manufacture Category III – Complex Design Protective Clothing. This includes annual factory audits to ensure all systems are maintained.

Article 8.4(a) of the above directive defines PPE “of complex design” intended to protect against mortal dangers that may seriously and irreversibly harm an individual. PPE to protect against electrical risks and dangerous voltages or that used as insulation in high-tension work is Category III.



Protal 1® is the standard industry fibre blend featuring the new generation of Protex fibre, blended with cotton to produce fabrics that offer comfort & permanent FR protection for the wearer.



Protal 3® takes modacrylic blends to a new technical level, providing enhanced protection for edge ignition, welding & metal splash protection at lighter weights. Specifically designed for multi-risk avoidance, it also offers improved fabric strength.



Protal® 5 provides a globally compliant super-strength lightweight fabric. This is a multi fibre patented Protex blend that provides high levels of permanent FR & welding protection, breathability, and against electric arc flash.



PRARC09

PULSAR® FR-AST-ARC Rail Spec Storm Coat

FEATURES & BENEFITS

- Inherently flame retardant and anti-static.
- Double stitched FR Reflective Tape.
- Adjustable and elasticated cuffs for superior fitting.
- FR lining and FR pocket bags.
- FR Reflective piping on pocket flap edges.
- Visible FR-AST-ARC standards transfer.

Colour

Orange

Fabric

PROTAL® 5 - 260gsm patented fibre blend of Protex enhanced inherent multi-fibre woven fabric

Sizes

S - 6XL

Standards

EN ISO 20471:2013 Class 3 | RIS 3279-TOM

EN ISO 11611:2015 Class 2 A1 | EN ISO 11612:2015 A1 B1 C1 D1 E3 F1

EN 1149-5:2008 (EN 1149-3:2004) | IEC 61482-2:2009 Class 2

ATPV 24.1 Cal/cm² | EN343:2003 3:3


**NEW
ARRIVAL**
24.1 CAL/CM²

PRARC10

PULSAR® FR-AST-ARC Rail Spec Salopette

FEATURES & BENEFITS

- Inherently flame retardant and anti-static.
- Double stitched FR Reflective Tape.
- Plastic zip fly fastening with stud fastened waistband.
- Detachable elasticated braces.
- Visible FR-AST-ARC standards transfer.

Colour

Orange

Fabric

PROTAL® 5 - 330gsm patented fibre blend of Protex enhanced inherent multi-fibre woven fabric

Sizes

S - 4XL

Standards

EN ISO 20471:2013 Class 2 | RIS-3279 TOM

EN ISO 11612:2015 A1 B1 C1 D1 E1 F1 | EN ISO 11611:2015 Class 1

EN 1149-5:2008 (EN 1149-5:2004) | IEC 61482-2:2009 Class 2

ATPV 22.9 Cal/cm² | EN343:2003 Class 3:3


**NEW
ARRIVAL**
22.9 CAL/CM²

PRARC11

PULSAR® FR-AST-ARC Hood

Colour

Orange

Sizes

One Size


53

PRARC05

PULSAR® FR-AST-ARC Rail Spec Combat Coverall

FEATURES & BENEFITS

- Double stitched FR reflective tape.
- Internal knee pad pockets.
- Elasticated wrists with plastic stud adjustment.
- Triple stitched inseam and twin stitched structural seams.
- Additional 5 bar tacks on crotch crossover seam.
- FR thread used throughout.

Colour

Orange

Fabric

PROTAL® 5 - 310gsm patented fibre blend of Protex enhanced inherent multi-fibre woven fabric

Sizes

S - 6XL

Standards

EN ISO 20471:2013 Class 3 | EN ISO 11612:2008 A1 A2 B1 C1 E1 F1

EN ISO 11611:2015 Class 1 | EN 1149-5:2015

IEC 61482-2:2009 Class 1 | ATPV 16.0 Cal/cm²

RIS 3279-TOM



16.0 CAL/CM²

42.6 CAL/CM²
combined with XARC01/03







PRARC07

PULSAR® FR-AST-ARC Rail Spec Combat Trouser

FEATURES & BENEFITS

- Double stitched FR reflective tape.
- Combat, rear & side pockets.
- Internal knee pad pockets (knee pads not included).
- Triple plastic stud and zip fly fastening.
- Triple stitched inseam and twin stitched structural seams.
- Additional 5 bar tacks on crotch crossover seams.
- FR sewing thread used throughout.

Colour

Orange

Fabric

PROTAL® 5 - 310gsm patented fibre blend of Protex enhanced inherent multi-fibre woven fabric

Sizes

30" - 44" waist in Short Leg (29")

28" - 50" waist in Regular Leg (31")

30" - 44" waist in Tall Leg (33")

Standards

EN ISO 20471:2013 Class 2 | EN ISO 11612:2015 A1 A2 B1 C1 E1 F1

EN ISO 11611:2015 Class 1 | EN 1149-5:2008

IEC 61482-2:2009 Class 1 | ATPV 16.0 Cal/cm²

RIS 3279-TOM



16.0 CAL/CM²

42.6 CAL/CM²
combined with XARC01/03



PRARC21

PULSAR® FR-AST-ARC Rail Spec Polo Shirt

FEATURES & BENEFITS

- Thermally applied reflective tape.
- Inherently flame retardant.
- Concealed 3 button placket.
- FR thread used throughout.
- Visible FR standards transfer to sleeve.
- FR knitted collar and cuffs.

Colour

Orange

Fabric

PROTAL® 3 - 220gsm patented fibre blend of Protex enhanced inherent multi-fibre knitted fabric

Sizes

S - 5XL

Standards

EN ISO 20471:2013 Class 3
EN ISO 11612:2015 A1 B1 C1
EN 1149-5:2008
IEC 61482-2:2009 Class 1
ATPV 6.2 Cal/cm²
RIS 3279-TOM

6.2 CAL/CM²

PRARC20

PULSAR® FR-AST-ARC Rail Spec Sweat Shirt

FEATURES & BENEFITS

- Thermally applied reflective tape.
- FR ribbed neck, cuff & waistband.
- Inherently flame retardant.
- Visible FR standards transfer to sleeve.
- Set in sleeve design.

Colour

Orange

Fabric

PROTAL® 1 - 275gsm Protex patented fibre blend of Protex enhanced inherent multi-fibre knitted fabric

Sizes

M - 5XL

Standards

EN ISO 20471:2013 Class 3
EN ISO 11612:2015 A1 B1 C1
EN 1149-5:2008
IEC 61482-2:2009 Class 1
ATPV 12.8 Cal/cm²
RIS 3279-TOM

12.8 CAL/CM²



PARC21

PULSAR® FR-AST-ARC Polo Shirt

FEATURES & BENEFITS

- Thermally applied reflective tape.
- Inherently flame retardant.
- Concealed 3 button placket.
- FR thread used throughout.
- Visible FR standards transfer to sleeve.
- FR knitted collar and cuffs.

Colour

Yellow

Fabric

PROTAL® 1 - 230gsm Protex patented fibre blend of Protex enhanced inherent multi-fibre knitted fabric

Sizes

S - 4XL

Standards

EN ISO 20471:2013 Class 3

EN ISO 11612:2008 A1 B1 C1

EN 1149-5:2008

IEC 61482-2:2009 Class 1

ATPV 9.2 Cal/cm²



9.2 CAL/CM²



XFRC101 | XFRC103

PULSAR® FR Long Sleeve Top & Long Pants

FEATURES & BENEFITS

- Traditional t-shirt design.
- Super high performance inherently flame retardant.
- Knitted cuffs for extra comfort.
- Visible FR standards transfer to right sleeve.
- Interlock knit fabric construction.

Colour

XFRC101 - Black (Top)

XFRC103 - Black (Pant)

Fabric

PROTAL® 1 - 220gsm patented fibre blend of Protex enhanced inherent multi-fibre knitted fabric

Sizes

S - 3XL

Standards

EN ISO 11612:2008 A1 B1 C1



XFRC14 | XFRC15

PULSAR® FR Balaclava & Neck Tube

FEATURES & BENEFITS

- Double layer for extra protection.
- Interlock knit fabric construction.
- Visible FR standards transfer.

Colour

XFRC14 - Black or Navy (Balaclava)

XFRC15 - Black (Neck Tube)

Fabric

PROTAL® 1 - 220gsm patented fibre blend of Protex enhanced inherent multi-fibre knitted fabric

Sizes

One Size

Standards

EN ISO 11612:2008 A1 B1 C1



XARC01 | XARC03

PULSAR® FR-AST-ARC Long Sleeve Top & Long Pants

FEATURES & BENEFITS

- Sports style fit & design.
- Super high performance inherently flame retardant.
- Red contrast flat lock FR aramid thread.
- Visible FR standards transfer to sleeve.
- FR knitted cuff for extra comfort.
- Interlock knit fabric construction.

Colour

XARC01 - Black/Red (Top)

XARC03 - Black/Red (Pant)

Fabric

PROTAL® 1 - 220gsm patented fibre blend of Protex enhanced inherent multi-fibre knitted fabric

Sizes

S - 3XL

Standards

EN ISO 11612:2008 A1 B1 C1

EN1149-5:2008

IEC 61482-2:2009 Class 1

ATPV 9.2 Cal/cm²9.2 CAL/CM²

42.6 CAL/CM²
combined with PRARC05/07





XARC14

PULSAR® FR-AST-ARC Balaclava

FEATURES & BENEFITS

- Super high performance inherently flame retardant.
- Red contrast flatlock FR aramid thread.
- Visible FR standards transfer.
- Interlock knit fabric construction.

Colour

Black/Red

Fabric

PROTAL® 1 - 220gsm patented fibre blend of Protex enhanced inherent multi-fibre knitted fabric

Sizes

One Size

Standards

EN ISO 11612:2008 A1 B1 C1

EN1149-5:2008

IEC 61482-2:2009 Class 1

ATPV 9.2 Cal/cm²

9.2 CAL/CM²



XARC21

PULSAR® FR-AST-ARC Polo Shirt**FEATURES & BENEFITS**

- Interlock knit construction.
- Concealed 3 button placket.
- FR knitted collar & cuffs.
- Inherently flame retardant.
- Visible FR standards transfer to sleeve.

Colour

Navy

Fabric

PROTAL® 1 - 220gsm patented fibre blend of Protex enhanced inherent multi-fibre knitted fabric

Sizes

S - 3XL

Standards

EN ISO 11612:2008 A1 B1 C1

EN1149-5:2008

IEC 61482-2:2009 Class 1

ATPV 9.2 Cal/cm²**9.2 CAL/CM²**

XARC20

PULSAR® FR-AST-ARC Sweat Shirt**FEATURES & BENEFITS**

- Brushed inner for extra warmth.
- FR knitted collar, cuffs & hem.
- Inherently flame retardant.
- Visible FR standards transfer to sleeve.

Colour

Navy

Fabric

PROTAL® 1 - 330gsm patented fibre blend of Protex enhanced inherent multi-fibre knitted fabric

Sizes

S - 3XL

Standards

EN ISO 11612:2008 A1 B1 C1

EN1149-5:2008

IEC 61482-2:2009 Class 1

ATPV 17.0 Cal/cm²**17.0 CAL/CM²**





THERMAL COLLECTION



BZ1501

PULSAR® Blizzard Mens Thermal Long Sleeve Top

Colour

Navy or White

Fabric

215gsm VILOFT® / polyester blend

Sizes

S - 3XL



BZ1502

PULSAR® Blizzard Mens Thermal Short Sleeve Top

Colour

Navy or White

Fabric

215gsm VILOFT® / polyester blend

Sizes

S - 3XL



BZ1503

PULSAR® Blizzard Mens Thermal Long Pants

Colour

Navy or White

Fabric

215gsm VILOFT® / polyester blend

Sizes

S - 3XL



FEATURES & BENEFITS

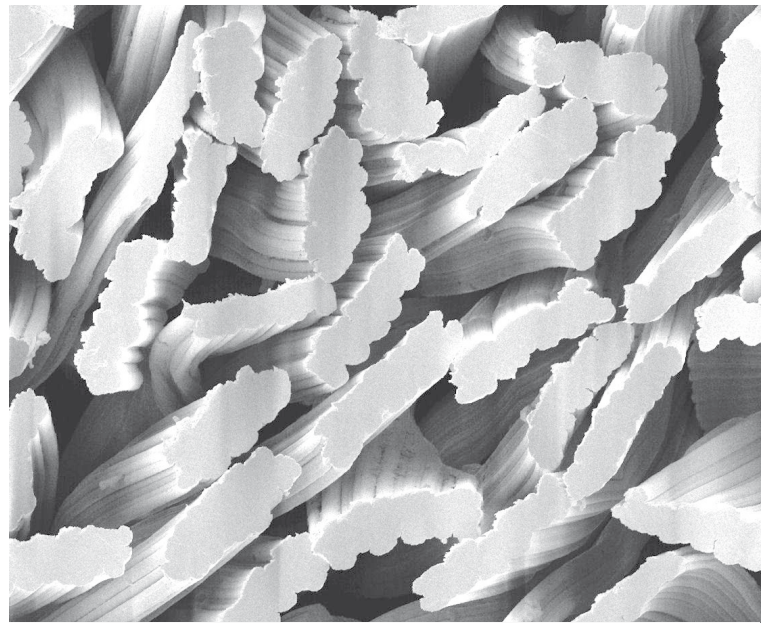
- Naturally wicking next to skin thermal base layers.
- Fabric certified as suitable for use in temperatures down to -15°C.
- 215gsm polyester/Viloft® blend offers excellent thermal and wicking performance.

VILOFT®

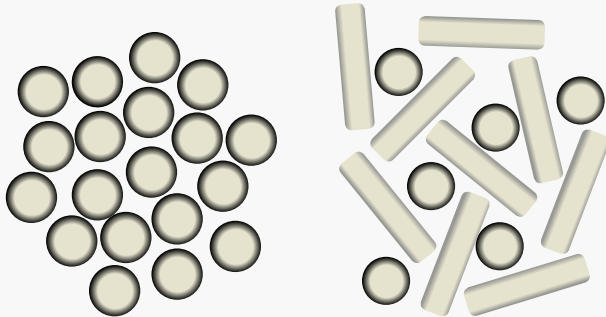
A NEW DIMENSION OF COMFORT

The world of VILOFT® is flat

After almost 100 years of production of round cellulosic fibres, 1985 saw the creation of VILOFT® - the world's first flat viscose fibre. The flat cross section delivers flexibility in the fibres and increases their surface area. When spun into a yarn, VILOFT® fibres align in a random pattern and form hollow spaces filled with air.



Microscopic image of a yarn made of 100% VILOFT®. The large hollow space are clearly visible.

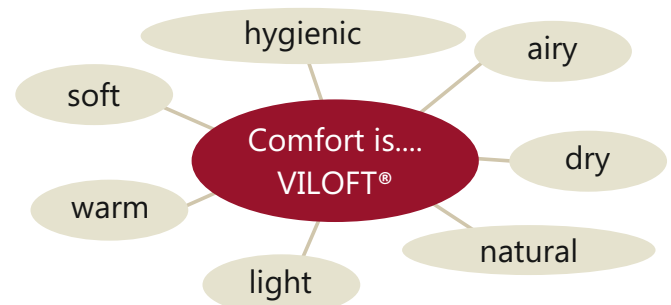


Round fibres

Fibres with a round cross section form only limited hollow spaces inside a yarn.

Blends with VILOFT®

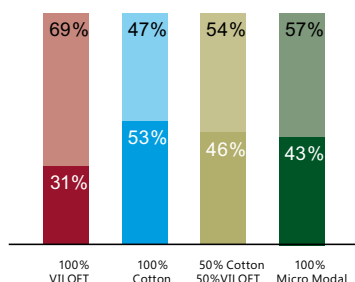
VILOFT® fibres in the blend form larger hollow spaces inside a yarn.



VILOFT® - the ultimate definition of comfort

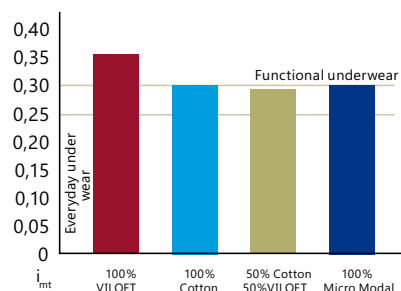
How is comfort defined? We have identified the properties which are necessary to give the wearer a feeling of comfort, and we have discovered that VILOFT® provides all of them.

Percentage of Air inside yarns



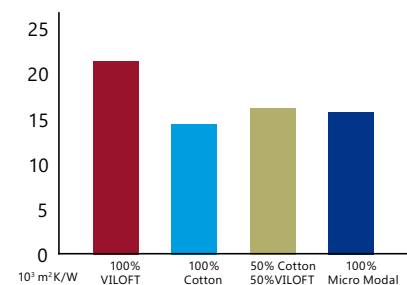
Compared to 100% cotton, VILOFT® significantly increases the amount of air entrapped inside the yarn - even in blends.

Water Vapour Permeability



VILOFT® fabrics show a level of breathability that exceeds the threshold for underwear by more than 15%.

Thermal Insulation



Due to the air trapped inside the yarn, VILOFT® fabrics show an enhanced thermal insulation value

BZ1550

PULSAR® Blizzard Ladies Thermal Long Sleeve Top

Colour

White

Fabric

215gsm VILOFT® / polyester blend

Sizes

8 - 18



BZ1551

PULSAR® Blizzard Ladies Thermal Short Sleeve Top

Colour

Navy or White

Fabric

215gsm VILOFT® / polyester blend

Sizes

8 - 18



BZ1552

PULSAR® Blizzard Ladies Thermal Long Pants

Colour

White

Fabric

215gsm VILOFT® / polyester blend

Sizes

8 - 18



FEATURES & BENEFITS

- Naturally wicking next to skin thermal base layers.
- Fabric certified as suitable for use in temperatures down to -15°C.
- 215gsm polyester/Viloft® blend offers excellent thermal and wicking performance.

BZ1514

PULSAR® Thermal Balaclava**FEATURES & BENEFITS**

- Double layer thermal balaclava for maximum warmth.
- Can be worn under the chin or pulled up over the nose.
- Suitable for temperatures as low as -15°C.
- Flat locked & overlocked stitching.

Colour

Navy

Fabric

215gsm VILOFT® / polyester blend (double layer - 430gsm total)

Sizes

One Size



BZ1530

PULSAR® Thermal Mesh Ear Balaclava**FEATURES & BENEFITS**

- Double layer thermal balaclava for maximum warmth.
- Can be worn under the chin or pulled up over the nose.
- Suitable for temperatures as low as -15°C.
- Mesh ear design in accordance with rail requirements.
- Rail approved.
- Flat locked & overlocked stitching.

Colour

Navy

Fabric

215gsm VILOFT® / polyester blend (double layer - 430gsm total)

Sizes

One Size



STANDARDS

& TECHNICAL INFO



x **EN471**

x: garment class

Class 3 - highest class:

typically consist of upper body and full sleeved garments

Class 2 - mid level:

typically consist of short or no sleeve garments and some trousers

Class 1 - lowest level:

typically consist of lower body or partially fluorescent garments



x **EN ISO 20471**

y: level of the retro-reflective material (2 performance classes). Class 2 being the highest.



x **EN343**

RAIN PROTECTION & BREATHABLE PROPERTIES

x: protection against water penetration (3 classes)

y: breathable properties (3 classes)

Class 3:3 - level 3 resistance to water penetration; level 3 water vapour resistance (breathability)

Class 3:2 - level 3 resistance to water penetration; level 2 water vapour resistance (breathability)

Class 3:1 - level 3 resistance to water penetration; level 1 water vapour resistance (breathability)

y: breathable properties (3 classes)



EN ISO 11612

PROTECTION AGAINST HEAT & FLAME

THIS STANDARD REPLACES EN531

A: limited flame spread (essential condition) - fabric combination conforms to EN14116 index 3 (Limited Flame Spread)

B: (B1-B5) - insulation against convection heat

C: (C1-C4) - insulation against radiant heat

D: (D1-D3) - insulation against molten aluminium

E: (E1-E3) - insulation against molten cast iron

F: (F1-F3) - insulation against contact heat



EN ISO 11611

PROTECTIVE CLOTHING FOR USE IN WELDING AND ALLIED PROCESS

Class 1: lower level less hazardous welding situations

Class 2: high level more hazardous welding situations



EN1149-5

PROTECTION AGAINST ELECTROSTATIC

This standard covers 2 test methods (EN1149-1/EN1149-3) and the performance requirements (EN1149-5). It specifies material and design requirements for electrostatic dissipative protection clothing used as part of a total earthed system to avoid incendiary discharge of static electricity. Garments meeting this standard do not offer protection from mains voltage.



IEC 61482

PROTECTION AGAINST THE THERMAL HAZARDS OF AN ELECTRIC ARC

IEC 61482-2 is the European standard for the thermal hazards of an arc flash. The standard includes requirements for material testing and additional information for garments constructed from compliant materials.

Garments certified to this standard are defined as complex design and are subject to annual audits under Article 11 of the PPE Directive.

ATPV
EBT

ARC THERMAL PROTECTIVE VALUE

An Arc Thermal Protective Value (ATPV) refers to the maximum incident energy (in calories per centimeter squared) that protective equipment can be exposed to and prevent to onset of a second-degree burn.

ARC THERMAL PROTECTIVE VALUE (KNIT WEAR)

Ratings are based upon the total weight of the fabric and ratings can be stacked when using a layered system. A higher rating means better protection.



GO/RT 3279

RIS 3279-TOM

This Rail Group Standard mandates minimum requirements for high visibility clothing that is to be provided for wearing by people on the lineside or on or near the line. It applies to all high visibility clothing worn in order to meet the requirements of GE/RT8000 Rule Book.

The rail industry standard has now replaced GO/RT 3279 Issue 8. However, garments previously certified to GO/RT 3279 continue to meet the requirements of the rail industry standard.



EN 13758-1

PROTECTION AGAINST HARMFUL UV RAYS

Tested to the requirements of BS EN 13758-1:2002 - Textiles Solar UV protective properties. Clothing is designed to offer the wearer protection against solar UV exposure. The UPF (Ultra-violet protection factor) shall be larger than 50.

We are committed to constantly improve our existing range by adding features and updating to newer versions of International & European standards. A small number of the high visibility garments featured are certified to EN471:2013, however this standard has now been withdrawn and replaced by EN ISO 20471:2013. Garments certified to EN471:2003 are and continue to be both legal and valid. New garments submitted for certification or re-certification will be assessed and certified to EN ISO 20471:2013.



TECHNOLOGY PARTNERS

3M™ Scotchlite™ Reflective Tape

We incorporate 3M™ Scotchlite™ Reflective Tape throughout most of our PULSAR high visibility clothing collection. 3M is recognised around the world as one of the top manufacturers of retro-reflective materials, guaranteeing the conformity and quality of each and every garment.

Protal®

Protal® Ltd is a part of the Waxman Group who are one of the leading global distributors of a range of technical textile Protex modacrylic fibre blends, produced by Kaneka Corporation of Japan.

Teflon™

From apparel and outerwear, to bedding and upholstery, Teflon™ fabric protector provides durable, long-lasting protection against oil and water-based stains, dust and dry soil. Fabrics with Teflon™ stay looking newer for longer and are easier to care for, without impacting the look, touch, feel, colour or breathability of the fabric.

Viz Reflectives

Vizlite™ is a range of retro reflective tapes, films and transfer systems for use in high visibility safety clothing, casual and sportswear.

YKK®

YKK® are the world's largest zipper/zip pull manufacturer. YKK's own mission statement is to manufacture only useful, high quality zippers that would benefit, or enhance, the end-use goods in which they are installed. YKK® zippers are made to last longer and perform better than others on the market.

Viloft®

Viloft® is a high-tech fibre of 100% natural origin - it lends special properties and functionalities to a variety of textiles. Viloft® allows the production of very light and soft garments with incredible next to skin comfort.

Thinsulate™

Thinsulate™ insulation works by trapping air molecules between you and the outside. The more air a material traps in a given space, the greater its insulating value. Because the microfibres in Thinsulate™ insulation are far finer than other fibres, they trap more air in less space, which naturally makes it a better insulator. Thinsulate™ haven't repealed the laws of nature with their thin insulation; they have simply obeyed them better...to your advantage.

Cordura®

Cordura® fabric is what many of the most respected brands, retailers and militaries around the world use when they need to make a product that's durable, versatile and reliable. Constructed using high tenacity fiber technologies, weight for weight, Cordura® fabrics are exceptionally durable.

Orafol®

Orafol® Europe is one of the world's leading manufacturers of reflective materials. Their 200,000m² production facility in Oranienburg, near Berlin, is the most technologically advanced of its kind in Europe. Orafol® is the original inventor of microprismatic technology, which offers superior long distance visibility even in wet conditions.

Wearable Technologies

Wearable Technologies Limited (WTL) produce a range of electronic solutions which when incorporated into PPE clothing can dramatically increase worker safety, including LED's, Proximity Warming Systems and the automatic upload of Real-Time environmental data for increased user safety and immediate responses to any emergency.

RFX™

A high performance reflective tape specially selected and manufactured exclusively for PULSAR®, ensuring the highest level of visibility, even after repeated laundry. Sew on, heat applied or stretchy tapes are used throughout the PULSAR® collections.

SIZE GUIDE

(TO FIT)

MEASUREMENTS SHOWN IN INCHES



SIZE	OVER GARMENTS & WORKWEAR			WOMEN'S COMBAT TROUSERS		BASE LAYERS			
	MEN'S CHEST	WOMEN'S CHEST	WAIST	WAIST		MEN'S		WOMEN'S	
						CHEST	WAIST	CHEST	WAIST
XS / 8	31 - 34	29 - 32	28 - 30	30		-	-	29 - 31	25 - 27
S / 10	34 - 37	32 - 34	30 - 33	31		35 - 37	29 - 32	31 - 33	27 - 29
M / 12	37 - 40	34 - 37	33 - 36	32		37 - 39	32 - 35	33 - 35	29 - 32
L / 14	40 - 43	37 - 39	36 - 39	34		39 - 41	35 - 38	35 - 38	32 - 35
XL / 16	43 - 46	39 - 41	39 - 42	36		41 - 43	38 - 41	38 - 41	35 - 38
2XL / 18	46 - 50	41 - 43	42 - 44	38		43 - 46	41 - 44	41 - 43	38 - 41
3XL / 20	50 - 55	43 - 45	44 - 47	40		46 - 49	44 - 47	-	-
4XL / 22	55 - 59	45 - 47	47 - 49	42		-	-	-	-
5XL / 24	59 - 63	47 - 49	49 - 52	44		-	-	-	-
6XL / 26	63 - 66	49 - 52	52 - 55	46		-	-	-	-
7XL / 28	66 - 70	-	55 - 58	-		-	-	-	-

FIT INFORMATION

CHEST
Take the measurement across the fullest part, with your arms by your side.

BUST
Measure across the fullest part and over the shoulder blades, with your arms by your side. Please note your bra size may not reflect your true bust measurement.

WAIST
Around the smallest part of the body at the natural waistline.

HIPS
Measure around the fullest part, approximately 8" below the waist.

Protective clothing should work with the natural movement of the body, not against it.

For this reason getting the right fit that is most comfortable to you is important.

Too tight and the clothing will be uncomfortable and movement will be restricted. Too loose and the clothing can create unnecessary bulk.

Our collections have been designed to enhance performance and movement.



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