
LPCB Red Book



Part: 3

Automatic sprinkler, water
spray and deluge systems

bre

Introduction

BRE Global Ltd, based in the UK near London, is an independent third party organisation offering certification of fire, security and sustainability products and services to an international market. LPCB is the certification brand used for fire and security products and services. The LPCB mark is accepted worldwide. We have representative offices in China, India and Dubai. We are owned by the BRE Trust, a not-for-profit organisation.

LPCB listings can be accessed, free of charge, at www.redbooklive.com.

BRE Global additionally carries out:

- Fire Investigation
- Fire Risk Assessment
- Fire Safety Engineering
- Research
- Training

LPCB Listings

Listings are given in sections which list related groups of products and services such as suppression, security and so on. Each section also summarises the technical basis for the certification of each product or service. The Red Book listings should always be used in conjunction with rules, regulations and design specifications required by the relevant Authority having jurisdiction.

Listings comprise:

Volume 1: (This Volume)

- **Fire detection and alarm products, systems, and cables**
- **Manual fire extinguishing equipment**
- **Automatic sprinkler, water spray and deluge systems**
- **Fixed fire fighting products and systems**
- **Watermist systems**
- **Related installers**

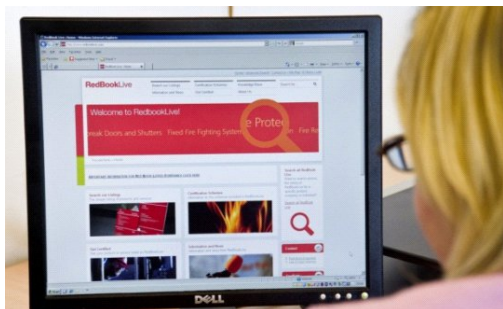
Volume 2:

- Passive fire protection products
- Security protection products
- Fire doors and shutters
- Smoke and fire ventilation systems
- Security Assessments - SABRE
- Related installers
- Management Systems
- Construction products

Listings are given in the name of the manufacturer or service provider, in alphabetical order. They can be downloaded free of charge from our website at www.redbooklive.com

Updates

Certification of products and services are updated regularly. To ensure that you are using the most up to date information please refer to www.redbooklive.com.



What is Third Party Certification?

A frequent concern of stakeholders is in knowing whether a product will perform in accordance with the stated specifications. These concerns can involve such product attributes as safety, health or environmental impacts, durability, compatibility, suitability for intended purposes or for stated conditions, and other similar considerations. These issues can all be addressed through product certification.

Third party certification is a conformity assessment process, carried out by a body that is independent of both supplier and customer organisations. It provides confirmation that products and services have met and will continue to meet the requirements of specified standards and other normative documents.

LPCB third party product certification schemes are quality assurance schemes and comprise initial type testing and technical evaluation, assessment and surveillance of the manufacturer's quality system and factory production procedures, regular audit testing, labelling and listing.

Similarly, LPCB schemes for suppliers of services (installers) are also quality assurance schemes comprising a technical assessment of an installer's capability, assessment and surveillance of the installer's quality system and production procedures, regular inspection of completed installations and listing.

Benefits of Third Party Certification

For specifiers, regulators, insurers, manufacturers and installers, the benefits of an LPCB approval are:

For specifiers and regulators:

- Risk reduction - specifying LPCB approved products and services demonstrates due-diligence and best endeavour and mitigates against possible accusations of negligence.
- Avoidance of costly mistakes - you can trust LPCB approved products and services to conform each and every time.
- Time - using Red Book Live to search for and assess products and services can save you time.

For manufacturers and installers:

- Increased global sales - LPCB approval is recognised and specified widely throughout the world. In some territories LPCB approval is a mandatory requirement.
- Added value of the product or service - LPCB approved products and services are recognised as providing added value given their ability to conform each and every time.
- Reduced liability - LPCB approved products and services demonstrate due-diligence which can reduce liability for both you and your customers.

What does LPCB Certification offer?

LPCB certification is carried out against Loss Prevention Standards (LPS's). These LPS's include reference to BS, EN or ISO standards as appropriate. LPCB certification are level 5 schemes as detailed in ISO/ IEC 17067 with the added requirement to have a quality system certificated to ISO 9001.

The technical requirements of LPCB schemes are given in the Loss Prevention Standards (LPSs). These documents are drafted by LPCB technical experts in conjunction with appropriate external experts. They are then peer reviewed by representatives from trade bodies, regulators, insurers, specifiers, manufacturers and other suppliers. Finally these documents are approved for use by the BRE Global Governing Body; the Body that oversees all of the certification activities of BRE Global.

VOLUME 1 LIST OF APPROVED PRODUCTS AND SERVICES

Product schemes comprise:

- Initial type testing and evaluation of product.
- Approval and surveillance of the manufacturer's (or supplier's) quality management system to ISO 9001
- Assessment and surveillance of the manufacturer's (or supplier) factory production control system (FPC).
- Periodic audit testing of the product from either the factory or marketplace.
- Labelling or marking as appropriate.
- Listing on Red Book Live

Installer schemes comprise:

- Technical assessment of the installation contractor's capability.
- Approval and surveillance of the contractor's quality management system to ISO 9001 or assessment against the requirements of the relevant Loss Prevention Standard where ISO 9001 is not appropriate.
- Regular surveillance inspections of on-going installations.
- The issue of Certificates of Conformity by the installer to demonstrate compliance for each installation.
- Listing in the Red Book.

The LPCB Mark - the Mark you can trust

After certification of a product or service the manufacturer or service provider may place the LPCB certification mark, as shown below, on the product, packaging and literature etc.



Where LPCB holds accreditation through the United Kingdom Accreditation Service (UKAS), the certified company may include the UKAS symbol (the Crown and Tick) alongside the LPCB mark for certain applications e.g. promotional literature or material and stationery, as shown below.



(Full details of LPCB accreditation can be found on the UKAS website at www.ukas.com)

Where for reasons of space or cost the use of the above full mark is not practical, then the following simplified mark may be applied directly to the product (for some schemes only). The LPCB scheme rules define how and where the marks can be used.



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Part

3

*AUTOMATIC SPRINKLER,
WATER SPRAY AND
DELUGE SYSTEMS*

PART 3: AUTOMATIC SPRINKLER, WATER SPRAY AND DELUGE SYSTEMS

INTRODUCTION

The standards used by LPCB for approving and listing sprinkler system components have been developed to ensure that they are suitable for use in systems installed to the LPC Sprinkler Rules incorporating EN 12845.

Many of these components may also be suitable for use in systems designed in accordance with other international and national codes such as NFPA.

To ensure that the systems work, it is recommended that they are designed, installed, commissioned and maintained by contractors who are approved by LPCB to LPS 1048 (for commercial systems) or LPS 1301 (for residential or domestic systems).

Listings in this section include:

Products

- Wet and dry alarm valves for sprinkler systems
- Wet alarm valve stations
- Accelerators and exhausters for dry pipe valves
- Deluge valves and actuators
- Direct reading flow meters
- Multiple jet controls
- Pipe couplings and fittings
- Flexible drops
- Pre-action control systems
- Sprinkler system recycling systems
- Pressure switches
- Sprinkler heads
- Sprinkler bulbs
- Suction tanks for automatic pumps
- Vortex inhibitors
- Water flow alarm switches
- Flow switch testing devices
- Water spray systems
- Fire pumps
- Multi-state fire pumps
- Diesel engines for sprinkler pump sets
- Pipework supports
- Check valves
- Stop valves
- Plastic pipes and fittings
- Metron actuators
- Water motor alarms

Products are approved in accordance with a range of standards, the details of which are given at the front of each section relevant to the product.

Installation and maintenance contractors

Contractors are approved in accordance with:

- *LPS 1048: Requirements for the approval of sprinkler system contractors in the UK and Ireland.*
- *LPS 1148: Requirements for contractors engaged in the design, installation, commissioning and servicing of automatic sprinkler systems (overseas)*
- *LPS 1301: Requirements for the approval of sprinkler installers in the UK and Ireland for residential and domestic sprinkler systems.*

Sprinkler systems are only effective if designed, installed and maintained correctly. The LPS 1048 scheme: *Requirements for the approval of Sprinkler Contractors in the UK and Ireland*, ensures that installers are capable of designing, installing and servicing sprinkler systems to acceptable installation standards.

Scheme Structure

There are 4 approval levels for Sprinkler Contractors in the LPS 1048 scheme. Figure 1 below shows the Categories of Work that are allowed to be carried out at each approval level in the LPS 1048 scheme.

Figure 1 Categories of Work		Approval Level			
		1	2	3	4
A	Pre-calculated ordinary hazard systems, installations, extensions and alterations (excluding water supplies)	√ 1	√ 2	√ 2	√ 3
B	Town's main water supplies	√ 1	√ 2	√ 2	√ 3
C	Pumped water supplies	√ 1	√ 2	√ 2	√ 3
D	Base build contracts (pre-calculated design principles)	X	√ 2	√ 2	√ 3
E	Systems, installations, extensions and alterations involving FHC design principles	X	X	√ 1	√ 3

- √ 1 - Allowed to undertake this Category of Work under supervision
- √ 2 - Allowed to undertake this Category of Work, supervision may be required depending on whether the Contractor has been granted self-certification for this Category of Work.
- √ 3- Allowed to undertake this Category of Work, Contractor can self-certificate this Category of Work
- X - Not Allowed to tender or undertake this Category of Work

Important Note to Specifiers

Specifiers should only use Sprinkler Contractors that are LPS 1048 approved to the appropriate level depending on the type of sprinkler work required, refer to the individual company listings for the approval level of Sprinkler Contractors.

Listing of Sprinkler Contractors

LPS 1048 Approved Sprinkler Contractors are listed alphabetically, regardless of their approval level.

Continual Assessment

The LPS 1048 scheme has over 80 sprinkler contractors that are continually assessed for their continued capability to undertake sprinkler contracts and for their compliance with the requirements of the LPS 1048 scheme.

Certificates of Conformity

In order to ensure that a sprinkler system is effective, specifiers should always request an LPS 1048 Certificate of Conformity. An LPS 1048 Certificate of Conformity may only be issued for a sprinkler system, installation, extension or alteration that is in full compliance with the one of the acceptable installation standards.

PART 3: SECTION 1.1

LPS 1048 APPROVED SPRINKLER CONTRACTORS - UK AND IRELAND

Any agreed minor deviations to the installation standard will be recorded on the LPS 1048 Certificate of Conformity. An LPS Certificate of Conformity cannot be issued if there is a major deviation to the installation standard. It should be noted that a Sprinkler Contractor's Completion Certificate is **NOT** an LPS 1048 Certificate of Conformity.

An LPS 1048 Certificate of Conformity only remains valid if the sprinkler system, installation, extension or alteration, covered by the certificate, is serviced and maintained in accordance with the original installation standard.

Supervision

Where an approved Sprinkler Contractor does not meet all the criteria set out in the LPS 1048 scheme document to self-certify any of the Categories of Work allowed under its approval level, it is required to have the Category (ies) of Work that it is not approved to self-certify supervised by an LPCB approved Supervising Body or the LPCB Supervisory Service.

Supervision involves a review of the design, an inspection of the installed sprinkler protection, and if water supplies are included in the scope of work, witnessing of the water supply proving tests, for compliance with the installation standard. For supervised contracts, the LPS 1048 Certificate of Conformity is issued by an LPCB approved Supervising Body or the LPCB Supervisory Service.

Details of the Categories of Work that each approved Sprinkler Contractor can self-certify, can be found in the individual company listings.

Financial assessment

The assessment and listing of Sprinkler Contractors in the LPS 1048 scheme covers only technical and quality aspects. All other contractual requirements are the responsibility of the parties to the contract.

Service and maintenance

Installers that undertake service and maintenance work are assessed for their capability to carry out such work in accordance with EN 12845 clause 20 and Technical Bulletin 203 of the LPC Rules for Automatic Sprinkler Installations.

A & F Sprinklers Limited

Unit 4, Transpennine Trading Estate, Gorrels Way, Rochdale, Lancashire OL11 2PX, United Kingdom

Tel: +44 (0)845 505 1550 • Fax: +44 (0)845 505 1660

E-mail: info@afsprinklers.co.uk • Website: www.afsprinklers.co.uk

Certificate No. ASC-001 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 4

Approved to self-certify all Categories of Work

No supervision required

A.M. Fire Systems Limited

Red Brook Mill, Bury Road, Rochdale OL11 4EE, United Kingdom

Tel: +44 (0)1706 639439 • Fax: +44 (0)1706 347733

E-mail: andyedmunds@amfiresystems.co.uk

Certificate No. ASC-076 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 3

Approved to self-certificate the following Categories of Work: A B C
The following Categories of Work to be supervised - D E

AD Sprinkler Protection Limited

103B Hyde Road, Denton, Manchester M34 3BB, United Kingdom
Tel: +44 (0)161 336 0001 • Fax: +44 (0)161 336 6608
E-mail: enquiries@adsprinklers.co.uk • Website: www.adsprinklers.co.uk

Certificate No. ASC-102 to LPS 1048

Design, installation and commissioning of industrial & commercial fire sprinklers systems.

Approval Level 3

Approved to self-certificate the following Categories of Work: A
The following Categories of Work to be supervised - B C D E

Alpha Sprinkler Protection Limited

101 Innovation Centre, Evolution Park, Haslingden Road, Blackburn BB1 2FD, United Kingdom
Tel: +44 (0)1254 584669
E-mail: info@alphasprinklers.co.uk • Website: www.alphasprinklers.co.uk

Certificate No. ASC-137 to LPS 1048

Design, installation and commissioning of industrial & commercial fire sprinklers systems.

Approval Level 2

Approved to self-certificate the following Categories of Work: A
The following Categories of Work to be supervised - B C D

Alpine Fire Engineers Limited

Alpine House, Hollins Brook Park, Bury, Lancashire BL9 8RN, United Kingdom
Tel: +44 (0)161 791 4500
E-mail: hello@alpinefire.co.uk • Website: www.alpinefire.co.uk

Certificate No. ASC-054 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial fire sprinklers systems.

Approval Level 4

Approved to self-certificate all Categories of Work
No supervision required

AML Fire Protection Limited

59 Carlton Avenue, Gillingham, Kent ME7 2JX, United Kingdom
Tel: +44 (0)1634 581412 • Fax: +44 (0)8709 748192
E-mail: enquiries@amlfireprotection.com • Website: www.amlfireprotection.co.uk

Certificate No. ASC-140 to LPS 1048

PART 3: SECTION 1.1

LPS 1048 APPROVED SPRINKLER CONTRACTORS - UK AND IRELAND

Design, installation and commissioning of industrial & commercial fire sprinklers systems.

Approval Level 1

Not approved to self-certificate any Category of Work
All Categories of Work to be supervised

APW Fire Protection Limited

Sydenham Business Park, 17 Heron Road, Belfast, Antrim BT3 9LE, United Kingdom
Tel: +44 (0)28 90827046 • Fax: +44 (0)28 90827049
E-mail: info@apwfp.com

Certificate No. ASC-107 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 3

Approved to self-certificate the following Categories of Work: A
The following Categories of Work to be supervised - B C D E

Argus Fire Protection Company Limited

Hendglade House, 46 New Road, Stourbridge, West Midlands DY8 1PA, United Kingdom
Tel: +44 (0)1384 376256 • Fax: +44 (0)1384 393955
E-mail: info@argusfire.co.uk • Website: www.argusfire.co.uk

Certificate No. ASC-005 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 4

Approved to self-certificate all Categories of Work
No supervision required

Armstrong Priestley Limited

Seventy Seven, Holbeck Lane, Leeds LS11 9UL, United Kingdom
Tel: +44 (0)113 3944040 • Fax: +44 (0)113 3944041
E-mail: info@armstrongpriestley.co.uk • Website: www.armstrongpriestley.co.uk

Certificate No. ASC-016 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial fire sprinklers systems.

Approval Level 4

Approved to self-certificate all Categories of Work
No supervision required

Automatic Sprinkler Company (Ireland) Limited trading as Automatic Fire & Integrated Solutions

Unit 3 Parkwest Road, Parkwest Industrial Park, Dublin 12, Ireland

Tel: +353 1 453 3108 • Fax: +353 1 453 3121

E-mail: info@automaticfire.ie • Website: www.automaticfire.ie

Certificate No. ASC-101 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 4

Approved to self-certificate all Categories of Work

No supervision required

B4 Fire Protection Limited

Unit 16, Summerhill Industrial Estate, Goodman Street, Birmingham B1 2SS, United Kingdom

Tel: +44 (0)121 820 6223

E-mail: info@b4fireprotection.co.uk • Website: www.b4fireprotection.co.uk

Certificate No. ASC-128 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 3

Not approved to self-certificate any Category of Work

All Categories of Work to be supervised

Bailey Fire Services Limited

Unit 22, The Colin Sanders Business Innovation Centre, Mewburn Road, Banbury, Oxon OX16 9PA, United Kingdom

Tel: +44 (0)1295 817657

E-mail: info@baileyfire.co.uk • Website: www.baileyfire.co.uk

Certificate No. ASC-150 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 1

Not approved to self-certificate any Category of Work

All Categories of Work to be supervised

Besseges Limited

Riverside, Dukinfield, Cheshire SK16 4HE, United Kingdom

Tel: +44 (0)161 308 3252 • Fax: +44 (0)161 339 5003

E-mail: sales@besseges.co.uk • Website: www.besseges.co.uk

Certificate No. ASC-041 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

PART 3: SECTION 1.1

LPS 1048 APPROVED SPRINKLER CONTRACTORS - UK AND IRELAND

Approval Level 4

Approved to self-certificate all Categories of Work
No supervision required

Blue Shield Fire Protection Limited

Unit 9 Sovereign Park, Cleveland Way, Hemel Hempstead, Hertfordshire HP2 7DA, United Kingdom
Tel: +44 (0)1442 828000 • Fax: +44 (0)1442 828001
E-mail: sales@blueshieldfire.co.uk • Website: www.blueshieldfire.co.uk

Certificate No. ASC-083 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial fire sprinklers systems.

Approval Level 3

Approved to self-certificate the following Categories of Work: A
The following Categories of Work to be supervised - B C D E

Bush (Fire Engineering) Limited

124 Barnfield Wood Road, Beckenham BR3 6SX, United Kingdom
Tel: +44 (0)203 021 1999
E-mail: sales@bushengineering.com • Website: www.bushengineering.com

Certificate No. ASC-065 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 3

Not approved to self-certificate any Category of Work
All Categories of Work to be supervised

Chubb Fire and Security Limited trading as Vipond Fire Protection

10-12 Glenfield Road, Kelvin Industrial Estate, East Kilbride, Lanarkshire G75 0RA, United Kingdom
Tel: +44 (0)1355 2375 25/80/88 • Fax: +44 (0)1355 263399
E-mail: admin.uk@vipondltd.co.uk • Website: www.vipondfire.co.uk

Burntwood:

Unit 7C, Zone 2 Burntwood Business Park, Burntwood, Staffordshire WS7 3JQ, United Kingdom
Tel: +44 (0)1543 471417

Certificate No. ASC-024 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial fire sprinklers systems.

Approval Level 4

Approved to self-certificate all Categories of Work
No supervision required

Churches Fire Security Limited

Fire House, Mayflower Close, Chandlers Ford, Eastleigh, Hampshire SO53 4AR, United Kingdom

Tel: 0370 608 4350 • Fax: 0870 608 4351

E-mail: sales@churchesfire.com • Website: www.churchesfire.com

Cannock

Aynsley House, Waterside Business Centre, Wolverhampton Road, Cannock, West Midlands WS11 1SN

Certificate No. ASC-068 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 3

Not approved to self-certificate any Category of Work

All Categories of Work to be supervised

Circum Fire Engineering Limited

Fountain Court, Rooms G9-G10, 2 Victoria Square, St Albans, Hertfordshire AL1 3TF, United Kingdom

Tel: +44 (0)1727 821228 • Fax: +44 (0)1727 822428

E-mail: info@circum.ltd.uk • Website: www.circum.ltd.uk

Certificate No. ASC-099 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 3

Approved to self-certificate the following Categories of Work: A

The following Categories of Work to be supervised - B C D E

Compco Fire Systems Limited

Cleeve House, Malvern Road, Lower Wick, Worcester WR2 4YX, United Kingdom

Tel: +44 (0)1905 741600 • Fax: +44 (0)1905 741620

E-mail: enquiries@compcofire.co.uk • Website: www.compcofire.co.uk

Hamilton:

Cadzow Industrial Estate, Cadzow House, Hamilton ML3 7QU, United Kingdom

Tel: +44 (0)1698 368790 • Fax: +44 (0)1698 426211

E-mail: enquiries@compcofire.co.uk • Website: www.compcofire.co.uk

Hemel Hempstead: (Note: Servicing not applicable for this office)

High Banks House, 84 Lawn Lane, Hemel Hempstead, Hertfordshire HP3 9HS, United Kingdom

Tel: +44 (0)1442 242821

E-mail: enquiries@compcofire.co.uk • Website: www.compcofire.co.uk

Certificate No. ASC-049 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial fire sprinklers systems.

Approval Level 4

PART 3: SECTION 1.1

LPS 1048 APPROVED SPRINKLER CONTRACTORS - UK AND IRELAND

Approved to self-certificate all Categories of Work
No supervision required

CT Fire Protection Limited

39 Higham Road, Burton Latimer, Kettering, Northants NN15 5PU, United Kingdom
Tel: +44 (0)1536 515872 • Fax: +44 (0)1536 515872
E-mail: info@ct-fireprotection.co.uk

Certificate No. ASC-135 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 1

Not approved to self-certificate any Category of Work
All Categories of Work to be supervised

DIS Sprinklers Limited

First Floor, Cranham House, Falcon Close, Quedgeley, Gloucester, Gloucestershire GL2 4LY, United Kingdom
Tel: +44 (0)1452 304927
E-mail: sprinklers@dis-ltd.co.uk • Website: www.dis-ltd.co.uk

Certificate No. ASC-030 to LPS 1048

Design, installation and commissioning of industrial & commercial fire sprinklers systems.

Approval Level 3

Approved to self-certificate the following Categories of Work: A
The following Categories of Work to be supervised - B C D E

Emtec Fire Systems Limited

1 Ellismuir Way, Tannochside Park, Uddingston, Glasgow G71 5PW, United Kingdom
Tel: +44(0)1698 808 030
E-mail: info@emtecfire.co.uk • Website: www.emtecfire.co.uk

Certificate No. ASC-129 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 3

Not approved to self-certificate any Category of Work
All Categories of Work to be supervised

Eversafe Fire Protection Limited

Unit 14 Precision 2 Building Park, Bingham Road, Sittingbourne, Kent ME10 3TR, United Kingdom
Tel: +44 (0)7730817785
E-mail: info@eversafefire.com

Certificate No. ASC-143 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 1

Not approved to self-certificate any Category of Work
All Categories of Work to be supervised

F.V.S. Limited

Broom Street, Off Huddersfield Road, Newhey, Rochdale OL16 3RY, United Kingdom
Tel: +44 (0)1706 848599
E-mail: fvs@fvslimited.co.uk • Website: www.fvslimited.co.uk

Certificate No. ASC-031 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 3

Not approved to self-certificate any Category of Work
All Categories of Work to be supervised

FES Limited, FES Sprinklers

Forth House, Pirnhall Business Park, Stirling FK7 8HW, United Kingdom
Tel: +44 (0)1786 819600 • Fax: +44 (0)1786 811456
E-mail: hq@fes.ltd.uk

Certificate No. ASC-096 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 3

Approved to self-certificate the following Categories of Work: A B C D
The following Categories of Work to be supervised - E

Fire Alarm Solutions Limited

Unit 2, Manor Way Business Centre, Fairview Industrial Park, Marsh Way, Rainham, Essex RM13 8UG,
United Kingdom
Tel: +44(0) 1708 521181 • Fax: +44(0) 1708 521182
E-mail: enquiries@fas-ltd.com • Website: www.fas-ltd.com

Certificate No. ASC-110 to LPS 1048

Design, installation and commissioning of industrial & commercial fire sprinklers systems.

Approval Level 1

Not approved to self-certificate any Category of Work
All Categories of Work to be supervised

PART 3: SECTION 1.1

LPS 1048 APPROVED SPRINKLER CONTRACTORS - UK AND IRELAND

Fire Logistics Limited

Unit 11B, Airport Industrial Estate, Newcastle upon Tyne NE3 2EF, United Kingdom

Tel: +44 (0)191 214 6400 • Fax: +44 (0)191 214 6303

E-mail: enquiries@firelogistics.co.uk • Website: www.firelogistics.co.uk

Certificate No. ASC-105 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial fire sprinklers systems.

Approval Level 3

Approved to self-certificate the following Categories of Work: A

The following Categories of Work to be supervised - B C D E

Fire Security (Sprinkler Installations) Limited

Homefield Road, Haverhill, Suffolk CB9 8QP, United Kingdom

Tel: +44 (0)1440 705815 • Fax: +44 (0)1440 704352

E-mail: info@firesecurity.co.uk • Website: www.firesecurity.co.uk

Certificate No. ASC-018 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 4

Approved to self-certificate all Categories of Work

No supervision required

Fireproof Fire Engineering Limited

The Old Brewery, 40 Coldhurst Street, Oldham, Lancashire OL1 2BQ, United Kingdom

Tel: +44 (0)161 620 0902 • Fax: +44 (0)161 620 0772

E-mail: contactus@fireproofsprinklersystems.com • Website: www.fireproofsprinklersystems.com

Certificate No. ASC-019 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 4

Approved to self-certificate all Categories of Work

No supervision required

First Fire Protection Limited

Unit 3, Network 4, Lincoln Road, Cressex Business Park, High Wycombe, Buckinghamshire HP12 3RF, United Kingdom

Tel: +44 (0)1494 522031/2

E-mail: enquiries@firstfireprotection.co.uk • Website: www.firstfireprotection.co.uk

Certificate No. ASC-037 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 3

Approved to self-certificate the following Categories of Work: A B
The following Categories of Work to be supervised - C D E

Gordonson Fire Protection Limited

Unit 2 Tawney Farm, Tawney Common, Theydon Mount, Epping, Essex CM16 7PU, United Kingdom
Tel: +44 (0)207 237 6707 • Fax: +44 (0)207 252 0152
E-mail: Danielle@Gordonson.co.uk

Certificate No. ASC-062 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 3

Approved to self-certificate the following Categories of Work: A B C
The following Categories of Work to be supervised - D E

Hall & Kay Fire Services Limited trading as Hall & Kay Fire Engineering (Ascot)

Unit E - Science Park, Silwood Business Park, Ascot, Berkshire SL5 7PW, United Kingdom
Tel: +44 (0)1344 203800 • Fax: +44 (0)1344 203801
E-mail: ascot@hkfire.co.uk • Website: www.hkfire.co.uk

West Midlands:

Sterling Park, Clapgate Lane, Woodgate Valley, West Midlands B32 3BU, United Kingdom
Tel: +44 (0)121 421 3311 • Fax: +44 (0)121 422 7312
E-mail: birmingham@hkfire.co.uk • Website: www.hkfire.co.uk

Manchester: (Note: Servicing not applicable for this office)

Oak Court, Clifton Business Park, Wynne Avenue, Clifton, Manchester M27 8FF, United Kingdom
Tel: +44 (0)161 872 7316 • Fax: +44 (0)161 872 7003
E-mail: Manchester@hkfire.co.uk • Website: www.hkfire.co.uk

Certificate No. ASC-071 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 4

Approved to self-certificate all Categories of Work
No supervision required

Irish Sprinkler & Fire Protection Limited

Damastown Green, Damastown Industrial Estate, Mulhuddart, Dublin 15, Ireland
Tel: +353 1 8614036 • Fax: +353 1 8614037
E-mail: irishsprinkler@joneseng.com • Website: www.joneseng.com

Certificate No. ASC-069 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 4

Approved to self-certificate all Categories of Work
No supervision required

PART 3: SECTION 1.1

LPS 1048 APPROVED SPRINKLER CONTRACTORS - UK AND IRELAND

J & J Design Limited trading as J & J Fire Engineering

Ewood Bridge Mill, Ewood Bridge, Lancashire BB4 6LB, United Kingdom

Tel: +44 (0)1706 223414 • Fax: +44 (0)1706 225639

E-mail: info@jjfe.co.uk • Website: www.jjfe.co.uk

Certificate No. ASC-052 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 4

Approved to self-certificate all Categories of Work

No supervision required

J G Truty Sprinkler Installations Limited

Unit 3 Whitelocks Farm, Garsons Lane, Bracknell, Berkshire RG42 6JA, United Kingdom

Tel: +44 (0)1494 443339 • Fax:

E-mail: info@jgtrutysi.co.uk • Website: www.jgtrutysi.co.uk

Certificate No. ASC-122 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 3

Approved to self-certificate the following Categories of Work: A

The following Categories of Work to be supervised - B C D E

Kean Building & Fire Protection Services Limited

39/43 Temple Bar, Willenhall, West Midlands WV13 1SH, United Kingdom

Tel: +44 (0)1902 603550 • Fax: +44 (0)1902 608017

E-mail: kean.fp@btconnect.com

Certificate No. ASC-061 to LPS 1048

Design, installation and commissioning of industrial & commercial fire sprinklers systems.

Approval Level 3

Approved to self-certificate the following Categories of Work: A B C

The following Categories of Work to be supervised - D E

KPFP Limited

11 Waterhouse Lane, Kingswood, Surrey KT20 6EB, United Kingdom

Tel: +44 (0)20 8544 4844 • Fax:

E-mail: fire@kpfp.co.uk • Website: www.kpfp.co.uk

Certificate No. ASC-089 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 3

Approved to self-certificate the following Categories of Work: A
The following Categories of Work to be supervised - B C D E

LHS REFKO Fire Installations Limited

Unit 1 C, Cockridgen Farm Estate, Brentwood Road, Brentwood, Essex CM13 3LH, United Kingdom

Tel: +44 (0)1277 815122

E-mail: rsmrefko@btconnect.com

Certificate No. ASC-043 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 1

Not approved to self-certificate any Category of Work
All Categories of Work to be supervised

M & P Fire Protection Limited

Unit 12, Viewpoint, Boxley Road, Maidstone, Kent ME14 2DZ, United Kingdom

Tel: +44 (0)800 043 1974 • Fax: +44 (0)1622 669631

E-mail: info@mpfireprotection.com • Website: www.mpfireprotection.com

Certificate No. ASC-133 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 3

Not approved to self-certificate any Category of Work
All Categories of Work to be supervised

M & P Fire Solutions Ltd

Unit 9 Robinhood Business Park, Robinhood Road, Dublin 22, Ireland

Tel: +353 1 4508248 • Fax: +353 1 4509028

E-mail: admin@mpfiresolutions.com • Website: www.mpfiresolutions.com

Certificate No. ASC-095 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 3

Approved to self-certificate the following Categories of Work: A
The following Categories of Work to be supervised - B C D E

Mercury Engineering

Mercury House, Sandyford Industrial Estate, Foxrock, Dublin 18 D18 XH79, Ireland

Tel: +353 1 216 3000 • Fax: +353 1 216 3006

E-mail: fireprotection@mercuryeng.com • Website: www.mercuryeng.com

Certificate No. ASC-058 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

PART 3: SECTION 1.1

LPS 1048 APPROVED SPRINKLER CONTRACTORS - UK AND IRELAND

Approval Level 4

Approved to self-certificate all Categories of Work
No supervision required

Mitie FS (UK) Ltd

650 Pavilion Drive, Northampton Business Park, Northampton NN4 7SL, United Kingdom
Tel: +44 (0)1926 495118
E-mail: Andrew.lewis@interserve.com • Website: www.mitie.com

Certificate No. ASC-123 to LPS 1048

Design, installation and commissioning of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 1

Not approved to self-certificate any Category of Work
All Categories of Work to be supervised

National Sprinkler Company Limited

Unit 4B, Fingal Bay Business Park, Balbriggan, Co Dublin, Ireland
Tel: +353 1 690 4001/4040 • Fax: +353 1 841 7400
E-mail: info@nationalsprinkler.ie • Website: www.nationalsprinkler.ie

Certificate No. ASC-092 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 3

Approved to self-certificate the following Categories of Work: A B C D
The following Categories of Work to be supervised - E

Nu-Form Fire UK Limited

390 Manchester Road, Gollinrod, Bury, Lancashire BL9 5NB, United Kingdom
Tel: +44 (0)1706 825111 • Fax: +44 (0)1706 827111
E-mail: info@nuformfire.com • Website: www.nuformfire.com

Certificate No. ASC-040 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial fire sprinklers systems.

Approval Level 4

Approved to self-certificate all Categories of Work
No supervision required

Pinnacle Fire Protection Limited

29 Pennylets Green, Stoke Poges, Slough, Buckingham SL2 4BU, United Kingdom
Tel: +44 (0)20 8611 2757
E-mail: enquiries@pinnaclefire.co.uk • Website: www.pinnaclefire.co.uk

Certificate No. ASC-146 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial fire sprinklers systems.

Approval Level 1

Not approved to self-certificate any Category of Work
All Categories of Work to be supervised

Protec Camerfield Limited

5 Churchill Way, Nelson, Lancashire BB9 6RT, United Kingdom
Tel: +44 (0)1282 717474 • Fax: +44 (0)1282 717475
E-mail: camerfield@protec.co.uk • Website: www.protec.co.uk

Certificate No. ASC-056 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 4

Approved to self-certificate all Categories of Work
No supervision required

Provincial Sprinkler Co. Limited

Unit 3, Building 2500, Avenue 2000, Cork Airport Business Park, Cork T12P6PT, Ireland
Tel: +353 (0)21 4965058 • Fax: +353 (0)21 4317425
E-mail: info@pscl.ie • Website: www.pscl.ie

Certificate No. ASC-087 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 4

Approved to self-certificate all Categories of Work
No supervision required

Pyro Protection Limited

Saddleworth Business Centre, Huddersfield Road, Delph, Oldham, Lancashire OL3 5DF, United Kingdom
Tel: +44 (0)1457 879 222 • Fax: +44 (0)1457 879 888
E-mail: info@pyroprotection.co.uk • Website: www.pyroprotection.co.uk

Certificate No. ASC-144 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial fire sprinklers systems.

Approval Level 4

Approved to self-certificate all Categories of Work
No supervision required

PART 3: SECTION 1.1

LPS 1048 APPROVED SPRINKLER CONTRACTORS - UK AND IRELAND

Red Rose Fire Protection Limited

Unit 24, Greendfields, Parker Lane, Whitestake, Preston, Lancashire PR4 4JX, United Kingdom

Tel: +44 (0)1772 822133 • Fax: +44 (0)1772 822144

E-mail: redrosefp@aol.com

Certificate No. ASC-044 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial fire sprinklers systems.

Approval Level 1

Not approved to self-certificate any Category of Work

All Categories of Work to be supervised

Redcroft Fire Limited

1A Hurst Road, Sidcup, Kent DA15 9AE, United Kingdom

Tel: +44 (0)208 308 0232 • Fax: +44 (0)208 300 1106

E-mail: info@redcroftfire.co.uk • Website: www.redcroftfire.co.uk

Certificate No. ASC-127 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 1

Not approved to self-certificate any Category of Work

All Categories of Work to be supervised

Richmond Fire Engineers Limited

30 Firby Road, Gallowfields Trading Estate, Richmond, North Yorkshire DL10 4ST, United Kingdom

Tel: +44 (0)1748 825612 • Fax: +44 (0)1748 825935

E-mail: enquiries@richmondfire.co.uk • Website: www.richmondfire.co.uk

Huddersfield

Independence House, Holly Bank Road, Lindley, Huddersfield, West Yorkshire HD3 3LX, United Kingdom

Tel: +44 (0)1748 825612

E-mail: design@richmondfire.co.uk • Website: www.richmondfire.co.uk

Certificate No. ASC-059 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 4

Approved to self-certificate all Categories of Work

No supervision required

Ross Fire Protection Limited

29 Deerdykes View, Westfield, Cumbernauld G68 9HN, United Kingdom
Tel: +44 (0)1236 738502 • Fax: +44 (0)1236 727977
E-mail: info@rossfire.co.uk • Website: www.rossfire.co.uk

Certificate No. ASC-021 to LPS 1048

Design, installation and commissioning of industrial & commercial fire sprinklers systems.

Approval Level 3

Not approved to self-certificate any Category of Work
All Categories of Work to be supervised

Select Fire Services Limited

Unit 3 Omni Business Park, Stadium Way, Harlow, Essex CM19 5FT, United Kingdom
Tel: +44 (0)1279 641979 • Fax: +44 (0)1279 641978
E-mail: info@selectfire.co.uk • Website: www.selectfire.co.uk

Certificate No. ASC-070 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 3

Approved to self-certificate the following Categories of Work: A B C D
The following Categories of Work to be supervised - E

Senseco Sprinkler Systems Limited

Unit 6, Fitzroy Business Park, Sandy Lane, Sidcup, Kent DA14 5NL, United Kingdom
Tel: +44 (0)208 309 5203 • Fax: +44 (0)208 302 5707
E-mail: admin@cwfire.co.uk • Website: www.cwfire.co.uk

Certificate No. ASC-136 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 3

Approved to self-certificate the following Categories of Work: A
The following Categories of Work to be supervised - B C D E

Solent Fire Protection Services Limited

IN4 Invincible, Daedalus Park, Daedalus Drive, Lee-on-the-Solent, Hampshire PO13 9FX, United Kingdom
Tel: +44 (0)2392 510230 • Fax: +44 (0)2392 511510
E-mail: info@solentfire.co.uk • Website: www.solentfire.co.uk

Certificate No. ASC-057 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 3

PART 3: SECTION 1.1

LPS 1048 APPROVED SPRINKLER CONTRACTORS - UK AND IRELAND

Approved to self-certificate the following Categories of Work: A B C
The following Categories of Work to be supervised - D E

Spectrum Fire Protection (UK) Limited

Middlemore Lane, Aldridge, Walsall, West Midlands WS9 8SP, United Kingdom
E-mail: enquiries@spectrumfire.co.uk • Website: www.spectrumfire.co.uk

Certificate No. ASC-108 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 1

Not approved to self-certificate any Category of Work
All Categories of Work to be supervised

Spence Refit Ltd

MacMillan House, Paddington Station, London W2 1FT, United Kingdom
Tel: 0207 387 1268
E-mail: Nick.Moore@spenceltd.co.uk • Website: www.spenceltd.co.uk

Certificate No. ASC-149 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial fire sprinklers systems.

Approval Level 1

Not approved to self-certificate any Category of Work
All Categories of Work to be supervised

Target Fire Systems Limited

Otters Holt, 3 West Lodges, Dunston Business Village, Dunston, Stafford, Staffordshire ST18 9AB, United Kingdom
Tel: +44 (0)1785 450279
E-mail: shaun.ellsmore@targetfiresystems.co.uk • Website: www.targetsiteservices.co.uk

Certificate No. ASC-124 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial fire sprinklers systems.

Approval Level 3

Not approved to self-certificate any Category of Work
All Categories of Work to be supervised

Taylor Fire Sprinklers Limited

Unit D, Avondale Way, Wakefield, West Yorkshire WF2 7QU, United Kingdom
Tel: +44 (0)1924 375971 • Fax: +44 (0)1924 609902
E-mail: info@taylorfiresprinklers.co.uk • Website: www.taylorfiresprinklers.co.uk

Certificate No. ASC-115 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 3

Approved to self-certificate the following Categories of Work: A
The following Categories of Work to be supervised - B C D E

TechniFire Solutions Limited

Elizabeth House, Holding Street, Rainham, Gillingham, Kent ME8 7JP, United Kingdom
Tel: +44 (0)8454 679 383
E-mail: helpdesk@technifiresolutions.com • Website: www.technifiresolutions.com

Certificate No. ASC-145 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial fire sprinklers systems.

Approval Level 1

Not approved to self-certificate any Category of Work
All Categories of Work to be supervised

Tew Plus Limited trading as LB Foster

Kings Cross HQ, 2nd Floor, Grays Inn Road, London WC1X 8BP, United Kingdom
Tel: +44 (0)203 995 5055
E-mail: Dstark-ext@lbfoster.com • Website: [//lbfoster.eu/en/](http://lbfoster.eu/en/)

Certificate No. ASC-147 to LPS 1048

Design, installation and commissioning of industrial & commercial fire sprinklers systems.

Approval Level 1

Not approved to self-certificate any Category of Work
All Categories of Work to be supervised

Thameside Fire Protection Co. Limited

Unit 4, Sovereign Park, Cranes Farm Road, Basildon, Essex SS14 3JD, United Kingdom
Tel: +44 (0)1268 597999 • Fax: +44 (0)1268 597998
E-mail: darko.petrovic@thamesidefire.co.uk • Website: www.thamesidefire.co.uk

Certificate No. ASC-053 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 3

Approved to self-certificate the following Categories of Work: A
The following Categories of Work to be supervised - B C D E

PART 3: SECTION 1.1

LPS 1048 APPROVED SPRINKLER CONTRACTORS - UK AND IRELAND

Thermotech Fire Protection Limited

Thermotech House, Building 1, Hercules Office Park, Bird Hall Lane, Cheadle Hulme, Stockport, Cheshire SK3 0UX, United Kingdom

Tel: +44 (0)161 476 5551 • Fax: +44 (0)161 476 2998

E-mail: info@thermotechsolutions.co.uk • Website: www.thermotechsolutions.co.uk

Certificate No. ASC-074 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial fire sprinklers systems.

Approval Level 3

Approved to self-certificate the following Categories of Work: A B

The following Categories of Work to be supervised - C D E

ThorFire Limited

Kennet Suite, Earl Business Centre, Earl Marl, Dowry Street, Oldham OL8 2PF, United Kingdom

Tel: +44 (0)161 339 7736

E-mail: info@thor-fire.co.uk • Website: www.thor-fire.co.uk

Certificate No. ASC-148 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial fire sprinklers systems.

Approval Level 1

Not approved to self-certificate any Category of Work

All Categories of Work to be supervised

Tyco Fire and Integrated Solutions (the trading company for Tyco Fire and Integrated Solutions (UK) Limited and Tyco Fire and Integrated Solutions (Ireland) Limited)

Tyco Park, Grimshaw Lane, Newton Heath, Manchester M40 2WL, United Kingdom

Tel: +44 (0)161 205 2321 • Fax: +44 (0)161 455 4459

Website: www.tycofis.com

Belfast

Tyco House, 13A Airport Road West, Belfast, Northern Ireland BT3 9ED, United Kingdom

Tel: +44 (0)2890 883560 • Fax: +44 (0)2890 814418

Website: www.tycofis.com

Bristol

180 Aztec West, Almondsbury, Bristol BS32 4TU, United Kingdom

Tel: +44 (0)1454 240071 • Fax: +44 (0)1454 626443

Website: www.tycofis.com

Gateshead

ADT House, 5th Avenue Business Park, Team Valley Trading Estate, Gateshead, Tyne & Wear NE11 0HF, United Kingdom

Tel: +44 (0)191 451 5100 • Fax: +44 (0)191 487 2177

Website: www.tycofis.com

Birmingham

Building 8, Quinton Business Park, Birmingham, West Midlands B32 1AF, United Kingdom

Tel: +44 (0)121 255 6000 • Fax: +44 (0)121 255 6100

Website: www.tycofis.com

Sunbury on Thames

Security House, The Summit, Hanworth Road, Sunbury on Thames, Middlesex TW16 5DB, United Kingdom

Tel: +44 (0)1753 574111 • Fax: +44 (0)1753 824226

Website: www.tycofis.com

Swansea

Tyco House, Phoenix Way, Swansea Enterprise Park, Swansea SA7 9EQ, United Kingdom

Tel: +44 (0)1792 465006 • Fax: +44 (0)1792 648535

Website: www.tycofis.com

Bellshill

Braidhurst House

Braidhurst House, 2 Finch Way, Strathclyde Business Park, Bellshill ML4 3PE, United Kingdom

Tel: +44 (0)1355 225132 • Fax: +44 (0)1698 812061

Website: www.tycofis.com

Certificate No. ASC-007 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinkler systems.

Approval Level 4

PART 3: SECTION 1.1

LPS 1048 APPROVED SPRINKLER CONTRACTORS - UK AND IRELAND

Approved to self-certificate all Categories of Work
No supervision required

UK Fire Safety Limited

13-15 Lostock Road, Urmston, Manchester M41 0ES, United Kingdom

Tel: +44 (0)161 746 8037 • Fax: +44 (0)161 746 8136

E-mail: mroyle@uk-firesafety.co.uk • Website: www.uk-firesafety.co.uk

Certificate No. ASC-098 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 3

Not approved to self-certificate any Category of Work
All Categories of Work to be supervised

Watermatic Fire Sprinklers Limited

11 Pleasant View, Macclesfield SK10 3LJ, United Kingdom

Tel: +44 (0)333 77 22 321

E-mail: info@watermaticfire.co.uk • Website: www.watermaticfire.co.uk

Certificate No. ASC-141 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 1

Not approved to self-certificate any Category of Work
All Categories of Work to be supervised

Woodward & Co Fire Protection Ltd

The Courtyard, Severn Drive, Tewkesbury, Gloucestershire GL20 8GD, United Kingdom

Tel: +44 (0)1684 850005

E-mail: office@woodward.uk.com • Website: www.woodward.uk.com

Certificate No. ASC-139 to LPS 1048

Design, installation and commissioning of industrial & commercial fire sprinklers systems.

Approval Level 3

Not approved to self-certificate any Category of Work
All Categories of Work to be supervised

Writtech Industrial Services Limited

Also including Writtech Manufacturing Limited, Mullingar Business Park, Mullingar, Co. Westmeath N91 Y657, Ireland

Tel: +353 44 9349857 • Fax: +353 44 9349858

E-mail: info@writtechltd.com

Certificate No. ASC-067 to LPS 1048

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinklers systems.

Approval Level 3

Not approved to self-certificate any Category of Work
All Categories of Work to be supervised

PART 3: SECTION 1.2

LPS 1048 SUPERVISING BODIES

LPCB Supervising Service

Bucknalls Lane, Watford, Hertfordshire WD25 9XX, United Kingdom

Tel: +44 (0)333 321 8811

E-mail: activeinstallers@bregroup.com • Website: www.redbooklive.com

Certificate No. n/a

LPS 1148 is a new scheme for installers of automatic fire sprinkler systems based overseas. This scheme is open to all Contractors operating anywhere in the World except the UK & Ireland and The Netherlands where LPCB operates different schemes for installers of automatic sprinkler systems.

Scheme Structure

There are 4 approval levels for Sprinkler Contractors in the LPS 1148 scheme. Figure 1 below shows the Categories of Work that are allowed to be carried out at each approval level in the LPS 1148 scheme.

Figure 1

Category of Work		Approval level			
		1	2	3	4
A	Pre-calculated ordinary hazard systems, installations, extensions and alterations (excluding water supplies)	✓	✓	✓	✓
B	Pre-calculated high hazard systems, installations, extensions and alterations (excluding water supplies)	✓	✓	✓	✓
C	Town's main water supplies	✓	✓	✓	✓
D	Pumped water supplies	✓	✓	✓	✓
E	Base build contracts (pre-calculated design principles)		✓	✓	✓
F	Systems, installations, extension and alterations involving FHC design principles			✓	✓

Installation standard

Sprinkler contractors will be assessed for their capability to design, install, test & commission and service (where undertaken) automatic fire sprinkler systems using their national sprinkler standard.

Important note to Specifiers

Specifiers should only use Sprinkler Contractors that are LPS 1148 approved to the appropriate level depending on the type of sprinkler work required, refer to the individual company listings for the approval level of Sprinkler Contractors.

Listing of Sprinkler Contractors

LPS 1148 Approved Sprinkler Contractors are listed alphabetically, regardless of their approval level.

Continual assessment

LPS 1148 approved sprinkler contractors are continually assessed for their continued capability to undertake sprinkler contracts and for their compliance with the requirements of the LPS 1148 scheme.

Certificates of Conformity

In order to ensure that a sprinkler system is effective, specifiers should always request an LPS 1148 Certificate of Conformity. An LPS 1148 Certificate of Conformity may only be issued for a sprinkler system, installation, extension or alteration that is in full compliance with the one of the acceptable installation standards.

Any agreed minor deviations to the installation standard will be recorded on the LPS 1148 Certificate of Conformity. A certificate of conformity cannot be issued if there is a major deviation to the installation standard. It should be noted that a Sprinkler Contractor's Completion Certificate is **NOT** an LPS 1148 Certificate of Conformity.

PART 3: SECTION 1.3

LPS 1148 APPROVED SPRINKLER CONTRACTORS - OVERSEAS

An LPS 1148 Certificate of Conformity remains valid only if:

1. The sprinkler system user carries out and maintains adequate records of the programme of daily and weekly inspections and checks required by the applicable installation standard, which will also be detailed in the operating and maintenance manual provided by the LPS 1148 Approved Sprinkler contractor, and
2. The sprinkler system is serviced, maintained and inspected strictly in accordance with the applicable installation standard by an LPS 1148 Approved Sprinkler Contractor, and
3. All subsequent repairs, alterations or additions to the sprinkler system are carried out by an LPS 1148 listed Sprinkler Contractors whose level of approval in the LPS 1148 scheme is appropriate to the scope of work carried out.

Supervision

Where an approved Sprinkler Contractor does not meet all the criteria set out in the LPS 1148 scheme document to self-certify any of the Categories of Work allowed under its approval level, it is required to have the Category(ies) of Work that it is not approved to self-certify supervised by the LPCB Supervisory Service.

Supervision involves a review of the design, an inspection of the installed sprinkler protection, and if water supplies are included in the scope of work, witnessing of the water supply proving tests, for compliance with the nominated installation standard. LPS 1148 Certificates of Conformity are then issued by the LPCB Supervisory Service.

Details of the Categories of Work that each approved Sprinkler Contractor can self-certify, can be found in the individual company listings.

Service and maintenance

Installers that undertake service and maintenance work are assessed for their capability to carry out such work in accordance with the nominated installation standard.

Financial assessment

The assessment and listing of Sprinkler Contractors in the LPS 1148 scheme covers only technical and quality aspects. All other contractual requirements are the responsibility of the parties to the contract.

Alberta Fire & Security Equipment Limited

Zone 3, Triq San Gwakkın, Central Business District, Birkirkara CBD 3030, Malta

Tel: +356 21 443538 • Fax: +356 21 484077

E-mail: enquiries@alberta.com.mt • Website: www.alberta.com.mt

Certificate No. ASCO-001 to LPS 1148

Approval Level 4

Approved to self-certify all Categories of Work
No supervision required

Automatic sprinklers can be installed in residential and domestic premises to safeguard life, property and the environment yet two thirds of fire fatalities occur in unsprinklered residential and multi-occupancy properties such as care homes and blocks of flats.

Equipment designs and system configurations are constantly evolving. In order to ensure adequate protection, sprinkler system installers need and appropriate technical competency in both design and installation.

LPCB has developed LPS 1301 *Requirements for the approval of Sprinkler Installers in the UK and Ireland for Residential and Domestic Sprinkler Systems*. This scheme was produced with the assistance of installers, fire brigades, local government, insurers and end users.

The key requirements of the scheme are that:-

- The company must be totally responsible for all aspects of the project, including the work of any sub-contractors
- The company has designated permanent employees including a 'Design Supervisor' and an 'Installation Supervisor' who are suitably trained and experienced in their roles
- The company maintains adequate records of all aspects of its activities.

Firms approved under this scheme are audited every 6 months looking at their compliance to LPS 1301 including visits to site.

Ecotect Engineering Limited

5 Underbank Way, Rossendale, Lancashire BB4 5HR, United Kingdom

Tel: +44 (0)333 456 0011

E-mail: ask@ecotectfire.com • Website: www.ecotectfire.com

Certificate No. ARI-002 to LPS 1301

Harmony Fire Limited

Clarence House, Watercombe Lane, Lynx Trading Estate, Yeovil, Somerset BA20 2SU, United Kingdom

Tel: +44 (0)1963 361250

E-mail: info@harmonyfire.co.uk • Website: www.harmonyfire.co.uk

Certificate No. ARI-004 to LPS 1301

Marlowe Fire & Security Limited

Unit 8, Wilford Industrial Estate, Wilford, Nottingham NG11 7EP, United Kingdom

Tel: +44 (0)333 010 2000

E-mail: hello@marlowefireandsecurity.com • Website: www.marlowefireandsecurity.com

Certificate No. ARI-003 to LPS 1301

PART 3: SECTION 3.1

WET AND DRY ALARM VALVES FOR SPRINKLER SYSTEMS

This section lists products approved in accordance with:

- EN12259-2 *Fixed firefighting systems. Components for sprinkler and water spray systems. Wet alarm valve assemblies*
- EN12259-3 *Fixed firefighting systems. Components for sprinkler and water spray systems. Dry alarm valve assemblies*
- LPCB Schedule of requirements

It is strongly recommended that all alarm valves, dry-pipe valves and back-pressure valves be the subject of a maintenance contract, satisfying the requirements of the *LPC Rules for Automatic Sprinkler Installations*.

The nominal orifice size of valves listed is given in millimetres.

The products shall be installed and maintained in accordance with the manufacturer's instructions.

MEFA Italia SpA

Via G.B. Morgagni, 16B, Pogliano Milanese (MI) 20010, Italy

Tel: +39 02 93540195 • Fax: +39 02 93543208

E-mail: danielepeluso@mefaitalia.com • Website: www.mefaitalia.com

Certificate No: 638Aa to EN 12259-2: 1999 & EN 12259-3:2000

Wet and Dry Alarm Valves

Product Name	Model	Sizes (mm)	LPCB Ref. No.
Wet Alarm Valve	B	80, 100, 150, 200 ^(1, 2, 3, 4)	638Aa/01
	D	100, 150, 200 ^(1, 2, 3, 5)	638Aa/02
	E	100, 150, 200 ^(1, 2, 3, 6)	638Aa/03
Dry Alarm Valve	A	80 ^(1, 2, 4, 7)	638Aa/04
	B	100, 150 ^(1, 2, 5, 7)	638Aa/05
	E	100 ^(1, 2, 6, 7)	638Aa/06

Minimax GmbH

Industriestrasse 10/12, D-23840 Bad Oldesloe, Germany

Tel: +49 4531 803 8064 • Fax: +49 4531 803 500

Website: www.minimax.de

Certificate No: 1118c to EN 12259-3:2000 + Amendment A1:2001 & Amendment A2: 2005

Dry Alarm Valve

Product Name	Model (alternative designations)	Sizes (mm)	LPCB Ref. No.
Dry Alarm Valve with and without Model D-2 Accelerator	AVD-1	80,100, 150, 165	1118c/01

PART 3: SECTION 3.1

WET AND DRY ALARM VALVES FOR SPRINKLER SYSTEMS

Rapidrop Global Limited

Rutland Business Park, Newark Road, Peterborough PE1 5WA, United Kingdom

Tel: +44 (0)1733 847 510 • Fax: +44 (0)1733 553 958

E-mail: rapidrop@rapidrop.com • Website: www.rapidrop.com

Certificate No: 566b to EN 12259-2:1999 + Amendment A1:2001 & Amendment A2: 2005

Wet Alarm Valves

Product Name	Model	Sizes (mm)	LPCB Ref. No.
Wet Alarm Valve	B	80, 100, 150, 200 ^(1, 2, 3, 4)	566b/01
	D	100, 150, 200 ^(1, 2, 3, 5)	566b/02
	E	100, 150 ^(1, 2, 3, 6)	566b/03

Rolland Sprinklers

235 Route de la Biolle, ZA le Sauvage, Mognard 73410, France

Tel: +33 479 547 250 • Fax: +33 479 547 248

E-mail: info@rolland-sprinklers.com

Certificate No: 295b to EN 12259-2 & EN 12259-3

Wet and Dry Alarm Valves

Product Name	Model	Sizes (mm)	LPCB Ref. No.
Wet Alarm Valve	B	80, 100, 150, 200 ^{2, 3, 4)}	295b/01
	D	80, 100, 150, 200 ^{2, 3, 5)}	295b/02
	E	80, 100, 150, 200 ^{2, 3, 6)}	295b/03
Dry Alarm Valve	A	80 ^(1, 2, 4, 7)	295b/04
	B	100, 150 ^(1, 2, 5, 7)	295b/05
	E	100 ^(1, 2, 6, 7)	295b/06

The Reliable Automatic Sprinkler Co., Inc,

1470 Smith Grove Road, Liberty, South Carolina 29657, USA

Tel: +1 864 843 1734 • Fax: +1 864 843 1418

E-mail: jcevallos@reliablesprinkler.com • Website: www.reliablesprinkler.com

UK Sales Enquiries

Tel: +44 (0)1372 728899 • Fax: +44 (0)1372) 724461

Certificate No: 034n to EN 12259-3

Dry Alarm Valves

Product Name	Model	Sizes DN (mm)	LPCB Ref. No.
Reliable Dry Alarm Valve (1,2,3,4,5)	DDX	100	034n/01
	DDX	150	034n/02
	DDX	165	034n/03
Reliable Dry Alarm Valve (1,2,3,4,6)	DDX	50	034n/04
	DDX	65 (73.0)	034n/05
	DDX	65 (76.1)	034n/06
	DDX	80	034n/07

PART 3: SECTION 3.1

WET AND DRY ALARM VALVES FOR SPRINKLER SYSTEMS

Certificate No: 034s to EN 12259-3

Model EX Dry Pipe Alarm Valves

Product Name	Model	Sizes (mm)	LPCB Ref. No.
Reliable Dry Pipe Alarm Valve - 17.2 bar (Groove/Groove)	EX	DN50 (60.3 mm)	034s/01
	EX	DN65 (73.0 mm)	034s/02
	EX	DN65 (76.1 mm)	034s/03
	EX	DN80 (88.9 mm)	034s/04
	EX	DN100 (114.3 mm)	034s/05
Reliable Dry Pipe Alarm Valve – 20.7 bar (Groove/Groove or Flange/Groove or Flange/Flange)	EX	DN150 (165.1 mm)	034s/06
	EX	DN150 (168.3 mm)	034s/07
	EX	DN 200 (219.1 mm)	034s/08
Reliable Dry Pipe Alarm Valve – 17.2 bar (Groove/Groove or Flange/Groove or Flange/Flange)	EX	DN 200 (219.1 mm)	034s/08

Certificate No: 034b to EN 12259-2 & EN 12259-3

Wet & Dry Alarm Valves

Product Name	Model	Sizes (DN (mm))	LPCB Ref. No.
Reliable Alarm Valve (1) (5) (7)	E	65, 100, 150, 200	034b/01
Reliable Alarm Valve (3) (6) (7)	D	100, 150	034b/02
Reliable Dry Pipe Valve (4) (6) (7)	A	65	034b/03
Reliable High Pressure Alarm Valve (2) (5) (8)	E3	100, 165, 200	034b/04

Notes:

- 1) With flanged inlet and flanged outlet.
- 2) With grooved inlet and grooved outlet.
- 3) With flanged inlet and flanged or grooved outlet.
- 4) With threaded inlet and outlet.
- 5) Vertical or horizontal.
- 6) Vertical.
- 7) Maximum working pressure of 12 bar.
- 8) Maximum working pressure of 21 bar.

The Viking Corporation

210 N Industrial Park, Hastings, Michigan 49058, USA

Tel: +1 269 945 9501 • Fax: +1 269 945 9599

E-mail: techsvcs@vikingcorp.com • Website: www.vikingcorp.com

UK Sales Enquiries:

Tel: +44 (0)1427 875999 • Fax: +44 (0)1427 875998

Certificate No: 096b to EN12259-2:1999 + A3

Viking Wet Alarm Valve for Sprinkler Systems

Product Name	Model	Sizes (mm)	LPCB Ref. No.
Viking Wet Alarm Valve (1) (2)	J-1	80,100,150, 165 (OD) 200	096b/05

Certificate No: 096x to EN 12259-3:2000

Viking Dry Alarm Valve

Product Name	Description	LPCB Ref. No.
DRV-1	Dry Alarm valve	096x/01

PART 3: SECTION 3.1

WET AND DRY ALARM VALVES FOR SPRINKLER SYSTEMS

Tyco Building Services Products B.V. part of the Johnson Controls group of Companies

Kopersteden 1, 7547 TJ Enschede, The Netherlands

Tel: +31 53 4284444 • Fax: +31 53 4283377

E-mail: info-NL@tyco-bspd.com • Website: www.tycobuilding.com

Certificate No: 169b to EN 12259-2

Tyco Model AV-1 Wet Alarm valve

Product Name	Model	Sizes (mm)	LPCB Ref. No.
AV-1 Alarm Valve (Flange/Flange) (1, 2)	AV-1	100, 150, 200	169b/01
AV-1 Alarm Valve (Flange/Groove) (1, 2)	AV-1	100, 150, 200	169b/02
AV-1 Alarm Valve (Groove/Groove) (1, 2)	AV-1	100, 150, 200	169b/03

Certificate No: 169j to EN 12259-3:2000 + Amendment A1:2001 & Amendment A2: 2005

Dry Alarm Valve

Product Name	Model (alternative designations)	Sizes (mm)	LPCB Ref. No.
Dry Alarm Valve	DPV-1	65, 80	169j/01
	DPV-1	100, 150	169j/02

Venus Fire Protection Ltd

4105, Portland Blvd, Sherbrooke (Quebec) J1L 1X9, Canada

Tel: +1 819 820 8000 • Fax: +1 819 820 8002

E-mail: venus@venus.ca • Website: www.venus-fire.com

Certificate No: 638a to EN 12259-2:1999 including amendment A1:2001 and A2:2005

Astra Wet Alarm Valves

Product Name	Model	Sizes (mm)	LPCB Ref. No.
Wet Alarm Valve	B	80, 100, 150, 200 ^(1, 2, 3, 4)	638a/01
	D	100, 150, 200 ^(1, 2, 3, 5)	638a/02
	E	100, 150 ^(1, 2, 3, 6)	638a/03

Certificate No: 638c to EN 12259-3:2000

Dry Alarm Valves

Product Name	Model	Sizes (mm)	LPCB Ref. No.
Dry Alarm Valve	A	80 ^(1, 2, 4, 7)	638c/04
	B	100, 150 ^(1, 2, 5, 7)	638c/05
	E	100 ^(1, 2, 6, 7)	638c/06

PART 3: SECTION 3.1

WET AND DRY ALARM VALVES FOR SPRINKLER SYSTEMS

Victaulic Company

4901 Kesslersville Road, Easton, Pennsylvania 18040, USA

Tel: +1 610 559 3300 • Fax: +1 610 250 8817

E-mail: victaulic@victaulic.com • Website: www.victaulic.com

Certificate No: 104m to EN 12259-2:1999 + Amendment A1:2001 & Amendment A2: 2005

Globe Alarm Valve

Product Name	Model	Sizes (mm)	LPCB Ref. No.
Globe Alarm Valve	H1	80 ⁽²⁾⁽³⁾⁽⁶⁾ , 100 ⁽¹⁾⁽³⁾⁽⁶⁾ , 150 ⁽¹⁾⁽³⁾⁽⁶⁾ , 200 ⁽²⁾⁽³⁾⁽⁷⁾	104m/01
	H3	80 ⁽²⁾⁽⁴⁾⁽⁶⁾ , 100 ⁽²⁾⁽⁴⁾⁽⁶⁾ , 150 ⁽²⁾⁽⁴⁾⁽⁶⁾ , 200 ⁽²⁾⁽⁴⁾⁽⁷⁾	104m/02
	H2	80 ⁽¹⁾⁽⁵⁾⁽⁶⁾ , 100 ⁽¹⁾⁽⁵⁾⁽⁶⁾ , 150 ⁽¹⁾⁽⁵⁾⁽⁶⁾ , 200 ⁽¹⁾⁽⁵⁾⁽⁷⁾	104m/03

Certificate No: 104c to EN 12259-3

Model 768N Dry Alarm Valve

Product Name	Model	Sizes (mm)	LPCB Ref. No.
Series 768N Dry Alarm Valve	Series 768N	40, 50, 65, 80, 100, 150 & 200	104c/02

Certificate No: 104e to EN 12259-2

Series 751 Wet Alarm Valve

Product Name	Model	Sizes	LPCB Ref. No.
Series 751 Wet Alarm Valve	Series 751	80, 100, 150 & 200	104e/01

This section lists products approved in accordance with:

- LPCB Schedule of requirements

PART 3: SECTION 4

ACCELERATORS AND EXHAUSTERS FOR DRY PIPE VALVES

This section lists products approved in accordance with:

- LPS 1041 *Requirements and Testing Methods for Dry Pipe Valve Sets*
- EN12259-3 *Fixed Firefighting Systems - Components for sprinkler and water spray systems - Part 3: Dry Alarm Valve Assemblies*
- LPCB Schedule of requirements

All alarm valves, dry-pipe valves and back-pressure valves should be the subject of a maintenance contract, satisfying the requirements of the *LPC Rules for Automatic Sprinkler Installations*.

MEFA Italia SpA

Via G.B. Morgagni, 16B, Pogliano Milanese (MI) 20010, Italy

Tel: +39 02 93540195 • Fax: +39 02 93543208

E-mail: danielepeluso@mefaitalia.com • Website: www.mefaitalia.com

Certificate No: 638Ac to EN 12259-3:2000

Accelerator

Product Name	Model	LPCB Ref. No.
Accelerator	1	638Ac/01

Rolland Sprinklers

235 Route de la Biolle, ZA le Sauvage, Mognard 73410, France

Tel: +33 479 547 250 • Fax: +33 479 547 248

E-mail: info@rolland-sprinklers.com

Certificate No: 295c to EN 12259-3

Model 1 Accelerator

Product Name	Model	LPCB Ref. No.
Accelerator	1	295c/01

The Reliable Automatic Sprinkler Co., Inc,

1470 Smith Grove Road, Liberty, South Carolina 29657, USA

Tel: +1 864 843 1734 • Fax: +1 864 843 1418

E-mail: jcevallos@reliablesprinkler.com • Website: www.reliablesprinkler.com

UK Sales Enquiries:

Tel: +44 (0)1372 728899 • Fax: +44 (0)1372 724461

Certificate No: 034c to EN 12259-3:2000 + A1 & A2

Product Name	Description	LPCB Ref. No.
Model B1	Reliable Dry Alarm Valve Accelerator	034c/01

The Viking Corporation

210 N Industrial Park, Hastings, Michigan 49058, USA
Tel: +1 269 945 9501 • Fax: +1 269 945 9599
E-mail: techsvcs@vikingcorp.com • Website: www.vikingcorp.com

UK Sales Enquiries:

Tel: +44 (0)1427 875999 • Fax: +44 (0)1427 875998

Certificate No: 096c to EN 12259-3:2000 Including Amendments A1:2001 and A2:2005

Viking Accelerators

Approved Products

Viking Accelerator Model D-2

LPCB Ref.
No.
096c/03

Tyco Building Services Products B.V. part of the Johnson Controls group of Companies

Kopersteden 1, 7547 TJ Enschede, The Netherlands
Tel: +31 53 4284444 • Fax: +31 53 4283377
E-mail: info-NL@tyco-bspd.com • Website: www.tycobuilding.com

Certificate No: 864a to EN 12259-3

Model ACC-1 Dry Pipe Valve Accelerator

Product Name	Model	LPCB Ref. No.
Accelerator	ACC-1	864a/01

Venus Fire Protection Ltd

4105, Portland Blvd, Sherbrooke (Quebec) J1L 1X9, Canada
Tel: +1 819 820 8000 • Fax: +1 819 820 8002
E-mail: venus@venus.ca • Website: www.venus-fire.com

Certificate No: 638d to EN 12259-3:2000

Accelerator

Product Name	Model	LPCB Ref. No.
Accelerator	1	638d/01

PART 3: SECTION 5

DELUGE VALVES AND ACTUATORS

This section lists products approved in accordance with:

- LPCB Schedule of requirements
- Pr EN 12259-9 *Fixed firefighting systems - Components for sprinkler and water spray systems - Part 9: Deluge valve assemblies*

Deluge valves and actuators are currently approved to a schedule of requirements developed by LPCB unless otherwise stated, for use in automatic sprinkler installations.

All deluge valves should be the subject of a maintenance contract, satisfying the requirements of the *LPC Rules for Automatic Sprinkler Installations*.

The nominal orifice size of valves listed is given in millimetres.

GW Sprinkler A/S

Kastanievej 15, DK-5620 Glamsbjerg, Denmark
Tel: +45 64 72 2055 • Fax: +45 64 72 2255
E-mail: sales.dep@gwsprinkler.com

Certificate No: 084a to an LPCB Schedule of requirements

GW Deluge Valve Mk.III

Product Name	Description	Sizes (mm)	Maximum Working Pressure	LPCB Ref. No.
GW Deluge Valve Mk.III	Aluminium bronze	100mm, 150mm & 200mm	20 bar	084a/01

The Reliable Automatic Sprinkler Co., Inc,

1470 Smith Grove Road, Liberty, South Carolina 29657, USA
Tel: +1 864 843 1734 • Fax: +1 864 843 1418
E-mail: jcevallos@reliablesprinkler.com • Website: www.reliablesprinkler.com

UK Sales Enquiries:

Tel: +44 (0)1372 728899 • Fax: +44 (0)1372 724461

Certificate No: 034a

Certificate No: 034p to prEN 12259-9

Product Name	Model	Size DN (mm)	LPCB Ref. No.
Reliable Deluge Valve	BX	100	034a/01
	BX	150	
Reliable Dry Pilot Line Actuator			034a/03
Reliable Deluge Alarm Valve (1, 2, 3, 4, 5)	DDX	100	034p/01
	DDX	150	034p/02
	DDX	165	034p/03
Reliable Deluge Alarm Valve (2, 3, 4, 6, 7)	DDX	200	034p/04
Reliable Deluge Alarm Valve (1, 2, 3, 4, 8)	DDX	50	034p/05
	DDX	65 (73.0)	034p/06
	DDX	65 (76.1)	034p/07
	DDX	80	034p/08

Notes:

- 1) Maximum rated working pressure 20.7 bar.
- 2) With groove inlet and outlet.
- 3) Vertical orientation as indicated only.
- 4) Approved with or without "model B1" quick opening device (LPCB ref 034c/01).
- 5) Refer to manufacturer's instructions "Bulletins 510-C & 511-B"

- 6) Refer to manufacturer's instructions "Bulletin 515 Rev.A"
- 7) Maximum rated working pressure 17.2 bar
- 8) Refer to manufacturer's instruction "Bulletin 519"

The Viking Corporation

210 N Industrial Park, Hastings, Michigan 49058, USA
 Tel: +1 269 945 9501 • Fax: +1 269 945 9599
 E-mail: techsvcs@vikingcorp.com • Website: www.vikingcorp.com

UK Sales Enquiries:

Tel: +44 (0)1427 875999 • Fax: +44 (0)1427 875998

Certificate No: 096a to prEN 12259-9:2007

Viking Deluge Valve

Product Name	Description	Sizes	LPCB Ref. No.
Model F-1 & F-2	Flanged Inlet and Outlet	80mm, 100mm, 150mm, 200mm	096a/04
	Flanged Inlet and Grooved Outlet	80mm, 100mm, 150mm	096a/05
Model J-1 & J-2	Flanged Inlet and Outlet	80mm, 100mm, 150mm, 200mm	096a/06
	Flanged Inlet and Grooved Outlet	80mm, 100mm, 150mm	096a/07
Model F-1 & F-2	Screwed Inlet and Outlet	40mm, 50mm, 65mm	096a/08
	Grooved Inlet and Outlet	40mm, 50mm, 65mm, 80mm, 100mm, 150mm, 200mm	096a/09
Model J-1 & J-2	Screwed Inlet and Outlet	40mm, 50mm, 65mm	096a/10
	Grooved Inlet and Outlet	40mm, 50mm, 65mm, 80mm, 100mm, 150mm, 200mm	096a/11

Tyco Building Services Products B.V. part of the Johnson Controls group of Companies

Kopersteden 1, 7547 TJ Enschede, The Netherlands
 Tel: +31 53 4284444 • Fax: +31 53 4283377
 E-mail: info-NL@tyco-bspd.com • Website: www.tycobuilding.com

Certificate No: 169c

TFP Dry Pilot Actuator

Product Name	Model	LPCB Ref. No.
TFP Dry Pilot Actuator	Model DP-1	169c/01

Notes:

- 1) Maximum Inlet water pressure 17.2 bar
- 2) Maximum Inlet air pressure 3.4 bar
- 3) Refer to manufacturer's technical description TFP1380, dated August 2022
- 4) This product is an auxiliary device designed for use with Tyco Deluge Valve DV-5 & DV-5a

Certificate No: 169i to prEN 12259-9:2004

Deluge Valves

Product Name	Size	End fittings	LPCB Ref. No.
DV-5a Deluge Valve	DN 40	5) & 7)	169i/01
	DN 50	5) & 7)	
	DN 80	5) & 6)	
	DN 100	5) & 6)	
	DN 150 (165.1mm)	5) & 6)	
	DN 150 (168.3mm)	5) & 6)	
	DN 200	5) & 6)	

PART 3: SECTION 5

DELUGE VALVES AND ACTUATORS

Victaulic Company

4901 Kesslersville Road, Easton, Pennsylvania 18040, USA

Tel: +1 610 559 3300 • Fax: +1 610 250 8817

E-mail: victaulic@victaulic.com • Website: www.victaulic.com

Certificate No: 104d to prEN 12259-9 (September 2004)

Model 769N Deluge Valve

Product Name	Model	Sizes (mm)	LPCB Ref. No.
Series 769N Deluge Valve	Series 769	40, 50, 65, 80, 100, 150 & 200	104d/02

This section lists products approved in accordance with:

- LPS 1045 *Requirements & Testing Methods for direct reading Flow Meters.*

The following devices are suitable for use under the *LPC Rules for Automatic Sprinkler Installations*. The products shall be installed and maintained in accordance with the manufacturer's instructions.

Influx Measurements Limited

1A Bennett House, The Dean, Alresford, Hampshire SO24 9BQ, United Kingdom
Tel: +44 (0)1962 736736 • Fax: +44 (0)1962 736737
E-mail: sales@influxmeasurements.com

Certificate No: 464a to LPS 1045

'Firesure' Flowmeters

Product Name	Nominal Pipe Size to BS 1387 (DN)	Nominal Pipe Size to BS 3600 (DN)	Flow Range (dm ³ /min)	Connection Type	LPCB Ref. No.
Fireflange	50	200	150-700	Flange	464a/01
	80		300-1600	Flange	464a/02
	100		500-3500	Flange	464a/03
	150		900-7900	Flange	464a/04
Firegroove	50		2000-15000	Flange	464a/05
	80		150-700	Groove	464a/06
	100		300-1600	Groove	464a/07
	150 (165.1mm)		500-3500	Groove	464a/08
	150 (168.3mm)		900-7900	Groove	464a/09
			900-7900	Groove	464a/22
	200	2000-15000	Groove	464a/10	

Certificate No: 464a to LPS 1045

'Firesure X' Flowmeters

Product Name	Nominal Pipe Size to BS 1387 (DN)	Nominal Pipe Size to BS 3600 (DN)	Flow Range (dm ³ /min)	Connection Type	LPCB Ref. No.
Fireflange X	50	200	200-850	Flange	464a/11
	80		200-1800	Flange	464a/12
	100		400-4000	Flange	464a/13
	150		1100-9500	Flange	464a/14
Firegroove X	50		2500-17000	Flange	464a/15
	80		200-850	Groove	464a/16
	100		200-1800	Groove	464a/17
	150 (165.1mm)		400-4000	Groove	464a/18
	150 (168.3mm)		1100-9500	Groove	464a/19
			1100-9500	Groove	464a/24
	200	2500-17000	Groove	464a/20	

Mecon GmbH

Rontgenstrasse 105, Kerpen 50169, Germany
Tel: 0049 2237 6000611 • Fax: 0049 2237 6000620
Website: www.mecon.de

Certificate No: 1385a to LPS 1045: Issue 1.3

MECON Turbo-Lux 3 Direct Reading Flow Meters

Product Name	Nominal Pipe Size to BS 1387 (mm)	Nominal Pipe Size to BS 3600 (mm)	Flow Range (l/min)	Connection Type	LPCB Ref. No.
Turbo-Lux 3	50	50	75-375	Groove	1385a/01

PART 3: SECTION 6

DIRECT READING FLOW METERS

Product Name	Nominal Pipe Size to BS 1387 (mm)	Nominal Pipe Size to BS 3600 (mm)	Flow Range (l/min)	Connection Type	LPCB Ref. No.
	65	65	150 750	Groove	1385a/02
	80	80	220 1100	Groove	1385a/03
	80	80	300 1500	Groove	1385a/04
	100	100	380 1900	Groove	1385a/05
	100	100	460 2300	Groove	1385a/06
	100	100	600 3000	Groove	1385a/07
	100	100	680 3400	Groove	1385a/08
	150	150	760 3800	Groove	1385a/09
	150	150	1130 5650	Groove	1385a/10
	150	150	1500 7500	Groove	1385a/11
	150	150	1900 9500	Groove	1385a/12
		200	2200 11000	Groove	1385a/13
		200	3000 15000	Groove	1385a/14
		200	3800 19000	Groove	1385a/15
		200	4500 22500	Groove	1385a/16

Certificate No: 1385b to LPS 1045: Issue 1.3

Direct reading flow meters

Product Name	Nominal Pipe Size to BS 1387 (mm)	Nominal Pipe Size to BS 3600 (mm)	Flow Range (l/min)	Connection Type	LPCB Ref. No.
Turbo-Lux 3 PP	80	80	375 - 2100	Threaded	1385b/01
	80	80	375 - 2100	Groove	1385b/02

Roxspur Measurement & Control

2 Downgate Drive, Sheffield, South Yorkshire S4 8BT, United Kingdom

Tel: +44 (0)114 244 2521 • Fax: +44 (0)114 243 4838

Certificate No: 088a to LPS 1045: Issue 1.3

Type SGUV Mk 3 Direct Reading Flow Meters

Product Name	Pipe Size (mm)	Flow Range (dm ³ /min)	LPCB Ref. No.
Shunt Gpmeter	80	300 - 1500	088a/01
	100	500 - 2500	088a/02
	125	700 - 3500	088a/03
	150	1000 - 5000	088a/04

Certificate No: 088a to LPS 1045: Issue 1.3

Direct reading flow meters

Product Name	Nominal Pipe Size to BS1387 (mm)	Nominal Pipe Size to BS3600 (mm)	Flow Range (dm ³ /min)	Connection Type	LPCB Ref. No.
Type SGUV Mk 2 (1) (2)	50		150 - 750	Flange	088a/05
	80		300 - 2300	Flange	088a/06
	100		500 - 3500	Flange	088a/07
	150		900 - 8200	Flange	088a/08
			2500 - 12500	Flange	088a/09
	50	200	150 - 750	Groove	088a/10
	80		300 - 2300	Groove	088a/11
	100		500 - 3500	Groove	088a/12
	150		900 - 8200	Groove	088a/13
		200	2500 - 12500	Groove	088a/14

PART 3: SECTION 6
DIRECT READING FLOW METERS

Certificate No: 088b to LPS 1045: Issue 1.3

Direct Reading Flow Meters

Product Name	Nominal Size	Flow Range (dm ³ /min)	Connection Type	LPCB Ref. No.
Type SGUV Mk 3	50	150 - 750	Flange	088b/01
	80	300 - 2300	Flange	088b/02
	100	500 - 3500	Flange	088b/03
	150	900 - 8200	Flange	088b/04
	200	2500 -12500	Flange	088b/05
	50	150 - 750	Groove	088b/06
	80	300 - 2300	Groove	088b/07
	100	500 - 3500	Groove	088b/08
	150	900 - 8200	Groove	088b/09
	200	2500 -12500	Groove	088b/10

The Reliable Automatic Sprinkler Co., Inc,
1470 Smith Grove Road, Liberty, South Carolina 29657, USA
Tel: +1 864 843 1734 • Fax: +1 864 843 1418
E-mail: jcevallos@reliablesprinkler.com • Website: www.reliablesprinkler.com

Certificate No: 1385Ab to LPS 1045: Issue 1.3

Direct Reading Flow Meters

Product Name	Nominal Pipe Size to BS 1387 (DN)	Flow Range (l/min)	Connection Type	LPCB Ref. No.
RASCO Proving PipeTHD	80	375-2100	Threaded	1385Ab/01
RASCO Proving Pipe GRV	80	375-2100	Grooved	1385Ab/02

Tornatech Inc.
4100 Desserte Sud, A-440 Ouest, Laval, Québec H7T 0H3, Canada
Tel: +1 514 334 0523
Website: www.tornatech.com

Certificate No: 1385Ba to LPS 1045: Issue 1.3

TORNATECH GT-FluxFP Direct Reading Flow Meters

Product Name	Nominal Pipe Size to BS 1387 (mm)	Nominal Pipe Size to BS 3600 (mm)	Flow Range (l/min)	Connection Type	LPCB Ref. No.
GT-FluxFP	50	50	75 - 375	Groove	1385Ba/01
	65	65	150 - 750	Groove	1385Ba/02
	80	80	220 - 1100	Groove	1385Ba/03
	80	80	300 - 1500	Groove	1385Ba/04
	100	100	380 - 1900	Groove	1385Ba/05
	100	100	460 - 2300	Groove	1385Ba/06
	100	100	600 - 3000	Groove	1385Ba/07
	100	100	680 - 3400	Groove	1385Ba/08
	150	150	760 - 3800	Groove	1385Ba/09
	150	150	1130 - 5650	Groove	1385Ba/10
	150	150	1500 - 7500	Groove	1385Ba/11
	150	150	1900 - 9500	Groove	1385Ba/12
		200	2200 - 11000	Groove	1385Ba/13
		200	3000 - 15000	Groove	1385Ba/14
		200	3800 - 19000	Groove	1385Ba/15
		200	4500 - 22500	Groove	1385Ba/16

PART 3: SECTION 7

MULTIPLE JET CONTROLS

This section lists products approved in accordance with:

- LPCB Schedule of requirements

Multiple Jet Controls for use under the *LPC Rules for Automatic Sprinkler Installations* have been approved to a schedule of requirements developed by LPCB. The products shall be installed and maintained in accordance with the manufacturer's instructions.

GW Sprinkler A/S

Kastanievej 15, DK-5620 Glamsbjerg, Denmark

Tel: +45 64 72 2055 • Fax: +45 64 72 2255

E-mail: sales.dep@gwsprinkler.com

Certificate No: 084f to an LPCB Schedule of Requirements

GW Multiple Control Model B/B3

Certificated Products

		LPCB Ref. No.
GW Multiple Control Model B	Outlet) 40mm Glass bulb type	084f/01
GW Multiple Control Model B	Outlet) 50mm Glass bulb type.	084f/02
GW Multiple Control Model B3	Outlet) 20mm Glass bulb type.	084f/03

Tested to the FOC Requirements and Testing Methods for Multiple Controls, April 1984 and approved with plain and chromium finish.

Tyco Fire Products Manufacturing Limited (Stockport)

Stockport Trading Estate, Yew Street, Stockport, Cheshire SK4 2JW, United Kingdom

Tel: +44 (0)161 429 3400 • Fax: +44 (0)161 477 6729

E-mail: simon.giles@tyco-bspd.com • Website: www.tfpemea.com

Sales Enquiries:

Tel: +44 (0)161 875 0400 • Fax: +44 (0)161 875 0491

E-mail: info-uk@tyco-bspd.com • Website: www.tycobuilding.com

Certificate No: 007f

Tyco Multiple Jet Control

Certificated Products

		LPCB Ref. No.
Tyco Multiple Jet Control	(Double Outlet) 20mm Glass bulb type. A corrosion-resistant coating for the body and yoke has been approved under the LPC Rules for automatic sprinkler installations.	007f/01
Tyco Multiple Jet Control	(Single Outlet) 20mm Glass bulb type. A corrosion-resistant coating for the body and yoke has been approved under the LPC Rules for automatic sprinkler installations.	007f/02
Tyco Multiple Jet Control	(Double Outlet) ¹ 25mm, 40mm and 50mm Glass bulb type (68°C only)	007f/03

Note:

1) May also be used as a single outlet (with one outlet blanked off).

This section lists products approved in accordance with:

- LPS 1219 *Specification for Pipe Couplings*

All pipe couplings and fittings should be the subject of a maintenance contract, satisfying the requirements of the *LPC Rules for Automatic Sprinkler Installations*.

Aalberts Integrated Piping Systems APAC Inc

No 295, Sec 3, Wandan Road, Wandan Township, Pingtung County 91345, Taiwan ROC

Tel: +886 8 752 5877 • Fax: +886 8 753 0227

E-mail: info.apac@aalberts-ips.com • Website: www.shurjoint.com

Certificate No: 448a to LPS 1219

Pipe Couplings (SHURJOINT)

Product Name	Nominal Size (mm)	Pipe Outside Diameter (mm)	Pipe Ends	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.
Fig. 7705	50	60.3	R&C	EPDM	20	448a/01
	65	76.1	R&C	EPDM	20	
	80	88.9	R&C	EPDM	20	
	100	114.3	R&C	EPDM	20	
	125	139.7	R&C	EPDM	20	
	150	165.1	R&C	EPDM	20	
Fig. K-9 Dogtooth	200	219.1	R&C	EPDM	20	448a/02
	32	42.4	R&C	EPDM	15	
	40	48.3	R&C	EPDM	15	
	50	60.3	R&C	EPDM	12	
	65	76.1	R&C	EPDM	12	
	80	88.9	R&C	EPDM	12	
	100	114.3	R&C	EPDM	12	
	125	139.7	R&C	EPDM	15	
Rigid Coupling Model K-9H	150	165.1	R&C	EPDM	12	448a/16
	200	219.1	R&C	EPDM	15	
Reducing Coupling Fig. 7706	200	219.1	R&C	EPDM	20	448a/03
	50 x 40	60.3 x 48.3	R&C	EPDM	20	
	65 x 50	76.1 x 60.3	R&C	EPDM	20	
	80 x 50	88.9 x 60.3	R&C	EPDM	20	
	80 x 65	88.9 x 76.1	R&C	EPDM	20	
	100 x 50	114.3 x 60.3	R&C	EPDM	20	
	100 x 65	114.3 x 76.1	R&C	EPDM	20	
	100 x 80	114.3 x 88.9	R&C	EPDM	20	
	150 x 100	165.1 x 114.3	R&C	EPDM	20	
	200 x 150	219.1 x 165.1	R&C	EPDM	16	
Mechanical Tees Model 7721	65 x 32	76.1 x 42.4	T	EPDM	20	448a/04
	65 x 40	76.1 x 48.3	T	EPDM	20	
	80 x 32	88.9 x 42.4	T	EPDM	20	
	80 x 40	88.9 x 48.3	T	EPDM	20	
	80 x 50	88.9 x 60.3	T	EPDM	20	
	100 x 32	114.3 x 42.4	T	EPDM	20	
	100 x 40	114.3 x 48.3	T	EPDM	20	
	100 x 50	114.3 x 60.3	T	EPDM	20	
	100 x 65	114.3 x 76.1	T	EPDM	20	
	100 x 80	114.3 x 88.9	T	EPDM	20	
	150 x 32	165.1 x 42.4	T	EPDM	20	
	150 x 40	165.1 x 48.3	T	EPDM	20	
	150 x 50	165.1 x 60.3	T	EPDM	20	
	150 x 65	165.1 x 76.1	T	EPDM	20	
	150 x 80	165.1 x 88.9	T	EPDM	20	
150 x 100	165.1 x 114.3	T	EPDM	20		
Fig. 7722	80 x 40	88.9 x 48.3	G	EPDM	20	448a/05

PART 3: SECTION 8.1

PIPE COUPLINGS AND FITTINGS

Product Name	Nominal Size (mm)	Pipe Outside Diameter (mm)	Pipe Ends	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.
	80 x 50	88.9 x 60.3	G	EPDM	20	
	100 x 40	114.3 x 48.3	G	EPDM	20	
	100 x 50	114.3 x 60.3	G	EPDM	20	
	100 x 65	114.3 x 76.1	G	EPDM	20	
	100 x 80	114.3 x 88.9	G	EPDM	20	
	150 x 40	165.1 x 48.3	G	EPDM	20	
	150 x 50	165.1 x 60.3	G	EPDM	20	
	150 x 65	165.1 x 76.1	G	EPDM	20	
	150 x 80	165.1 x 88.9	G	EPDM	20	
	150 x 100	165.1 x 114.3	G	EPDM	20	
Fig. 723	32 x 15	42.2 x 21.3	T	EPDM	12	448a/06
	32 x 20	42.2 x 26.7	T	EPDM	12	
	32 x 25	42.2 x 33.7	T	EPDM	12	
	40 x 15	48.3 x 21.3	T	EPDM	12	
	40 x 20	48.3 x 26.7	T	EPDM	12	
	40 x 25	48.3 x 33.7	T	EPDM	12	
	50 x 15	60.3 x 21.3	T	EPDM	12	
	50 x 20	60.3 x 26.7	T	EPDM	12	
	50 x 25	60.3 x 33.7	T	EPDM	12	
	65 x 15	76.1 x 21.3	T	EPDM	12	
	65 x 20	76.1 x 26.7	T	EPDM	12	
	65 x 25	76.1 x 33.7	T	EPDM	12	
Transition Flange Model 7041	50	60.3	R&C	EPDM	16	448a/15
	65	76.1	R&C	EPDM	16	
	80	88.9	R&C	EPDM	16	
	100	114.3	R&C	EPDM	16	
	150	165.1	R&C	EPDM	16	
	200	219.1	R&C	EPDM	16	
Angle Pad Rigid Coupling Model Z05	32	42.4	R&C	EPDM	12	448a/16
	40	48.3	R&C	EPDM	12	
	50	60.3	R&C	EPDM	12	
	65	76.1	R&C	EPDM	12	
	80	88.9	R&C	EPDM	12	
	100	114.3	R&C	EPDM	12	
	125	139.7	R&C	EPDM	12	
	150	165.1	R&C	EPDM	12	
	200	219.1	R&C	EPDM	12	
Angle Pad Rigid Coupling Model Z07	32	42.4	R&C	EPDM	20	448a/17
	40	48.3	R&C	EPDM	20	
	50	60.3	R&C	EPDM	20	
	65	76.1	R&C	EPDM	20	
	80	88.9	R&C	EPDM	20	
	100	114.3	R&C	EPDM	20	
	125	139.7	R&C	EPDM	20	
	150	165.1	R&C	EPDM	20	
	200	219.1	R&C	EPDM	20	
	250	273.0	R&C	EPDM	20	
	300	323.9	R&C	EPDM	20	

Certificate No: 448a to LPS 1219

Pipe Fittings (SHURJOINT)

Product Name	Pipe Outside Diameter (mm)	Maximum Working Pressure (bar)	LPCB Ref. No.
90° Elbows Fig. 7110	60.3,76.1,88.9,114.3,139.7,165.1,219.1	20	448a/07
45° Elbows Fig. 7111	60.3,76.1,88.9,114.3,139.7,165.1,219.1	20	448a/08
Tees - Fig. 7120	60.3,76.1,88.9,114.3,139.7,165.1,219.1	20	448a/09
Caps. - Fig. 7160	60.3,76.1,88.9,114.3,139.7,165.1,219.1	20	448a/10
Concentric reducer - Fig. 7150	76.1 x 60.3, 88.9 x 60.3, 88.9 x 76.1, 114.3 x 60.3, 114.3 x 76.1, 114.3 x 88.9, 165.1 x 88.9, 165.1 x 114.3, 219.1 x 165.1	20	448a/11

PART 3: SECTION 8.1
PIPE COUPLINGS AND FITTINGS

Product Name	Pipe Outside Diameter (mm)	Maximum Working Pressure (bar)	LPCB Ref. No.
Reducing tee - Fig. 7121	114.3 x 114.3 x 76.1, 114.3 x 114.3 x 88.9, 165.1 x 165.1 x 88.9, 219.1 x 219.1 x 114.3, 219.1 x 219.1 x 165.1	20	448a/12
Pitcher Tee - Fig 7133	114.3 x 114.3 x 76.1, BSP thread	20	448a/14
Short Radius 90° Elbow - Fig 901	60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 219.1	20	448a/18
Short Radius Tee - Fig 903	60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 219.1	20	448a/19

ASC Engineered Solutions LLC
2 Holland Way, Exeter, New Hampshire 03833, USA
E-mail: orders@asc-es.com • Website: www.asc-es.com

Certificate No: 988Ea to LPS 1219 Issue 3

'Gr8LOK' Pipe Couplings

Product Name	Nominal Size	Pipe Outside Diameter (mm)	Pipe Ends	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.
Fig 8000 - Flexible Coupling	25	33.7	R&C	EPDM	25	988Ea/01
	32	42.4	R&C	EPDM	25	
	40	48.3	R&C	EPDM	25	
	50	60.3	R&C	EPDM	25	
	65	73.0	R&C	EPDM	25	
	65	76.1	R&C	EPDM	25	
	80	88.9	R&C	EPDM	25	
	100	108.0	R&C	EPDM	25	
	100	114.3	R&C	EPDM	25	
	125	133.0	R&C	EPDM	25	
	125	139.7	R&C	EPDM	25	
	125	141.3	R&C	EPDM	25	
	150	159.0	R&C	EPDM	25	
	150	165.1	R&C	EPDM	25	
	150	168.3	R&C	EPDM	25	
Fig 8400 - Rigid Coupling	200	219.1	R&C	EPDM	25	988Ea/02
	25	33.7	R&C	EPDM	25	
	32	42.4	R&C	EPDM	25	
	40	48.3	R&C	EPDM	25	
	50	60.3	R&C	EPDM	25	
	65	73.0	R&C	EPDM	25	
	65	76.1	R&C	EPDM	25	
	80	88.9	R&C	EPDM	25	
	100	108.0	R&C	EPDM	25	
	100	114.3	R&C	EPDM	25	
	125	133.0	R&C	EPDM	25	
	125	139.7	R&C	EPDM	25	
	125	141.3	R&C	EPDM	25	
	150	159.0	R&C	EPDM	25	
	150	165.1	R&C	EPDM	25	
150	168.3	R&C	EPDM	25		
Fig 8010 - Reducing Flexible Coupling	200	219.1	R&C	EPDM	25	988Ea/03
	50 x 40	60.3 x 48.3	R&C	EPDM	16	
	65 x 50	73.0 x 60.3	R&C	EPDM	16	
	65 x 40	76.1 x 48.3	R&C	EPDM	16	
	65 x 50	76.1 x 60.3	R&C	EPDM	16	
	80 x 50	88.9 x 60.3	R&C	EPDM	16	
	80 x 65	88.9 x 73.0	R&C	EPDM	16	
	80 x 65	88.9 x 76.1	R&C	EPDM	16	
	100 x 50	114.3 x 60.3	R&C	EPDM	16	
	100 x 65	114.3 x 73.0	R&C	EPDM	16	
	100 x 65	114.3 x 76.1	R&C	EPDM	16	
	100 x 80	114.3 x 88.9	R&C	EPDM	16	
	150 x 100	165.1 x 114.3	R&C	EPDM	16	
	150 x 100	168.3 x 114.3	R&C	EPDM	16	

PART 3: SECTION 8.1

PIPE COUPLINGS AND FITTINGS

Product Name	Nominal Size	Pipe Outside Diameter (mm)	Pipe Ends	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.
Fig 8400S - Light Duty Rigid Coupling	200 x 150	219.1 x 165.1	R&C	EPDM	16	988Ea/04
	200 x 150	219.1 x 168.3	R&C	EPDM	16	
	80	88.9	R&C	EPDM	16	
	100	108.0	R&C	EPDM	16	
	100	114.3	R&C	EPDM	16	
	125	139.7	R&C	EPDM	16	
	125	141.3	R&C	EPDM	16	
	150	159.0	R&C	EPDM	16	
	150	165.1	R&C	EPDM	16	
	150	168.3	R&C	EPDM	16	
Fig 8045 - Mechanical Tee, Threaded Outlet	200	219.1	R&C	EPDM	16	988Ea/05
	100 x 65	114.3 x 76.1	T	EPDM	16	
	100 x 80	114.3 x 88.9	T	EPDM	16	
	125 x 65	139.7 x 76.1	T	EPDM	16	
	125 x 80	139.7 x 88.9	T	EPDM	16	
	125 x 100	139.7 x 114.3	T	EPDM	16	
	150 x 65	165.1 x 76.1	T	EPDM	16	
	150 x 80	165.1 x 88.9	T	EPDM	16	
	150 x 100	165.1 x 114.3	T	EPDM	16	
	150 x 65	168.3 x 76.1	T	EPDM	16	
Fig 8046 - Mechanical Tee, Grooved Outlet	150 x 80	168.3 x 88.9	T	EPDM	16	988Ea/06
	150 x 100	168.3 x 114.3	T	EPDM	16	
	200 x 65	219.1 x 76.1	T	EPDM	16	
	200 x 80	219.1 x 88.9	T	EPDM	16	
	200 x 100	219.1 x 114.3	T	EPDM	16	
	100 x 65	114.3 x 76.1	G	EPDM	16	
	100 x 80	114.3 x 88.9	G	EPDM	16	
	125 x 65	139.7 x 76.1	G	EPDM	16	
	125 x 80	139.7 x 88.9	G	EPDM	16	
	125 x 100	139.7 x 114.3	G	EPDM	16	
Fig 8012 - Grooved Flange	150 x 65	165.1 x 76.1	G	EPDM	16	988Ea/08
	150 x 80	165.1 x 88.9	G	EPDM	16	
	150 x 100	165.1 x 114.3	G	EPDM	16	
	150 x 65	168.3 x 76.1	G	EPDM	16	
	150 x 80	168.3 x 88.9	G	EPDM	16	
	150 x 100	168.3 x 114.3	G	EPDM	16	
	200 x 65	219.1 x 76.1	G	EPDM	16	
	200 x 80	219.1 x 88.9	G	EPDM	16	
	200 x 100	219.1 x 114.3	G	EPDM	16	
	40	48.3	R&C	EPDM	16	
50	60.3	R&C	EPDM	16		
65	76.1	R&C	EPDM	16		
80	88.9	R&C	EPDM	16		
100	114.3	R&C	EPDM	16		
125	139.7	R&C	EPDM	16		
150	165.1	R&C	EPDM	16		
150	168.3	R&C	EPDM	16		
200	219.1	R&C	EPDM	16		

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'Gr8LOK' Pipe Fittings

Product Name	Pipe Outside Diameter (mm)	Max Working Pressure (bar)	LPCB Ref. No.
Fig 8050 - 90° Elbow	33.7, 42.4, 48.3, 60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	25	988Ea/09
Fig 8450 - 90° Short Elbow	60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	16	988Ea/10
Fig 8060 - Tee	33.7, 42.4, 48.3, 60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	25	988Ea/11
Fig 8460 - Short Tee	60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	16	988Ea/12
Fig 8051 - 45° Elbow	33.7, 42.4, 48.3, 60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	25	988Ea/13
Fig 8074 - Cap	33.7, 42.4, 48.3, 60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	25	988Ea/14
Fig 8068 - Cross	42.4, 48.3, 60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	25	988Ea/15

PART 3: SECTION 8.1
PIPE COUPLINGS AND FITTINGS

Product Name	Pipe Outside Diameter (mm)	Max Working Pressure (bar)	LPCB Ref. No.
Fig 8052 - 22.5° Elbow	76.1, 88.9, 114.3, 139.7, 165.1, 219.1	25	988Ea/16
Fig 8053 - 11.25° Elbow	60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 219.1	25	988Ea/17
Fig 8084 - Adaptor Flange	33.7, 42.4, 48.3, 60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	16	988Ea/18
Fig. 8072 Concentric Reducer Grooved	42.4 x 33.7, 48.3 x 42.4, 60.3 x 48.3, 76.1 x 60.3, 88.9 x 76.1, 114.3 x 88.9, 139.7 x 114.3, 165.1 x 139.7, 168.3 x 139.7, 219.1 x 168.3	25	988Ea/19
Fig. 8087 Concentric Reducer Threaded	60.3 x 48.3, 76.1 x 60.3, 88.9 x 76.1, 114.3 x 88.9, 139.7 x 114.3	25	988Ea/20
Fig 8061 - Reducing Tee	60.3 x 33.7, 60.3 x 48.3, 76.1 x 48.3, 76.1 x 60.3, 88.9 x 33.7, 88.9 x 48.3, 88.9 x 60.3, 88.9 x 76.1, 114.3 x 33.7, 114.3 x 48.3, 114.3 x 60.3, 114.3 x 76.1, 114.3 x 88.9, 139.7 x 114.3, 165.1 x 88.9, 165.1 x 114.3, 165.1 x 139.7, 168.3 x 60.3, 168.3 x 76.1, 168.3 x 88.9, 168.3 x 114.3, 168.3 x 139.7, 219.1 x 60.3, 219.1 x 88.9, 219.1 x 114.3, 219.1 x 168.3	25	988Ea/21

Jinan Meide Casting Co Ltd

Meide Science & Technology Park, Pingyin Industrial Park, Jinan, Shandong Province 250400, China
Tel: +86 531 87885062 • Fax: +86 531 87879387
E-mail: info@meide-casting.com • Website: http://www.meide-casting.com

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Pipe Couplings

Product Name	Nominal Size (mm)	Pipe Outside Diameter (mm)	Pipe Ends	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.
Flexible Coupling Fig 1N	25	33.7	R&C	EPDM	25	988a/01
	32	42.4	R&C	EPDM	25	
	40	48.3	R&C	EPDM	25	
	50	60.3	R&C	EPDM	25	
	65	73	R&C	EPDM	25	
	65	76.1	R&C	EPDM	25	
	80	88.9	R&C	EPDM	25	
	100	108	R&C	EPDM	25	
	100	114.3	R&C	EPDM	25	
	125	133	R&C	EPDM	25	
	125	139.7	R&C	EPDM	25	
	125	141.3	R&C	EPDM	25	
	150	159	R&C	EPDM	25	
	150	165.1	R&C	EPDM	25	
	150	168.3	R&C	EPDM	25	
	Rigid Coupling Fig 1G	200	219.1	R&C	EPDM	
25		33.7	R&C	EPDM	25	
32		42.4	R&C	EPDM	25	
40		48.3	R&C	EPDM	25	
50		60.3	R&C	EPDM	25	
65		73	R&C	EPDM	25	
65		76.1	R&C	EPDM	25	
80		88.9	R&C	EPDM	25	
100		108	R&C	EPDM	25	
100		114.3	R&C	EPDM	25	
125		133	R&C	EPDM	25	
125		139.7	R&C	EPDM	25	
125		141.3	R&C	EPDM	25	
150		159	R&C	EPDM	25	
150		165.1	R&C	EPDM	25	
Reducing Flexible Coupling Fig 1N		200	219.1	R&C	EPDM	25
	50 x 32	60.3x42.4	R&C	EPDM	16	
	50 x 40	60.3x48.3	R&C	EPDM	15	
	65 x 50	73x0x60.3	R&C	EPDM	16	

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PIPE COUPLINGS AND FITTINGS

Product Name	Nominal Size (mm)	Pipe Outside Diameter (mm)	Pipe Ends	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.
Light Duty Rigid Coupling Fig 1GS	65 x 40	76.1x48.3	R&C	EPDM	16	988a/04
	65 x 50	76.1x60.3	R&C	EPDM	16	
	80 x 50	88.9x60.3	R&C	EPDM	16	
	80 x 60	88.9 x 73	R&C	EPDM	16	
	80 x 65	88.9 x 76.1	R&C	EPDM	16	
	100 x 50	114.3 x 60.3	R&C	EPDM	16	
	100 x 60	114.3 x 73.0	R&C	EPDM	16	
	100 x 65	114.3 x 76.1	R&C	EPDM	16	
	100 x 80	114.3 x 88.9	R&C	EPDM	16	
	150 x 100	165.1 x 114.3	R&C	EPDM	16	
	150 x 100	168.3 x 114.3	R&C	EPDM	16	
	200 x 150	219.1 x 165.1	R&C	EPDM	16	
	200 x 150	219.1 x 168.3	R&C	EPDM	16	
	65	76.1	R&C	EPDM	16	
	80	88.9	R&C	EPDM	16	
	100	108	R&C	EPDM	16	
	100	114.3	R&C	EPDM	16	
	125	139.7	R&C	EPDM	16	
	125	141.3	R&C	EPDM	16	
	150	159	R&C	EPDM	16	
150	165.1	R&C	EPDM	16		
150	168.3	R&C	EPDM	16		
200	219.1	R&C	EPDM	16		
Threaded Mechanical Tee Fig 3J	100 x 65	114.3 x 76.1	T	EPDM	16	988a/05
	100 x 80	114.3 x 88.9	T	EPDM	16	
	125 x 65	139.7 x 76.1	T	EPDM	16	
	125 x 80	139.7 x 88.9	T	EPDM	16	
	125 x 100	139.7 x 114.3	T	EPDM	16	
	150 x 65	165.1 x 76.1	T	EPDM	16	
	150 x 80	165.1 x 88.9	T	EPDM	16	
	150 x 100	165.1 x 114.3	T	EPDM	16	
	150 x 65	168.3 x 76.1	T	EPDM	16	
	150 x 80	168.3 x 88.9	T	EPDM	16	
	150 x 100	168.3 x 114.3	T	EPDM	16	
	200 x 65	219.1 x 76.1	T	EPDM	16	
	200 x 80	219.1 x 88.9	T	EPDM	16	
Grooved Mechanical Tee Fig 3G	100 x 65	114.3 x 76.1	G	EPDM	16	988a/06
	100 x 80	114.3 x 88.9	G	EPDM	16	
	125 x 65	139.7 x 76.1	G	EPDM	16	
	125 x 80	139.7 x 88.9	G	EPDM	16	
	125 x 100	139.7 x 114.3	G	EPDM	16	
	150 x 65	165.1 x 76.1	G	EPDM	16	
	150 x 80	165.1 x 88.9	G	EPDM	16	
	150 x 100	165.1 x 114.3	G	EPDM	16	
	150 x 65	168.3 x 76.1	G	EPDM	16	
	150 x 80	168.3 x 88.9	G	EPDM	16	
	150 x 100	168.3 x 114.3	G	EPDM	16	
	200 x 65	219.1 x 76.1	G	EPDM	16	
	200 x 80	219.1 x 88.9	G	EPDM	16	
Grooved Flange Fig 321	200 x 100	219.1 x 114.3	G	EPDM	16	988a/08
	40	48.3	R&C	EPDM	16	
	50	60.3	R&C	EPDM	16	
	65	76.1	R&C	EPDM	16	
	80	88.9	R&C	EPDM	16	
	100	114.3	R&C	EPDM	16	
	125	139.7	R&C	EPDM	16	
	150	165.1	R&C	EPDM	16	
	150	168.3	R&C	EPDM	16	
	200	219.1	R&C	EPDM	16	

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PIPE COUPLINGS AND FITTINGS

Pipe Fittings

Product Name	Pipe Outside Diameter (mm)	Max Working Pressure (bar)	LPCB Ref. No.
90° Elbow Fig 90	33.7, 42.4, 48.3, 60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	25	988a/09
Short Style 90° Elbow Fig 90S	60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	16	988a/10
Tee Fig 130	33.7, 42.4, 48.3, 60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	25	988a/11
Short Style Tee Fig 130S	60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	16	988a/12
45° Elbow Fig 120	33.7, 42.4, 48.3, 60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	25	988a/13
Cap Fig 300	33.7, 42.4, 48.3, 60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1, 273.0, 323.9	25	988a/14
Cross Fig 180	42.4, 48.3, 60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	25	988a/15
22.5° Elbow Fig 110	76.1, 88.9, 114.3, 139.7, 165.1, 219.1	25	988a/16
11.25° Elbow Fig 105	60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 219.1	25	988a/17
Adaptor Flange Fig 321G	33.7, 42.4, 48.3, 60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	16	988a/18
Concentric Reducer Grooved Fig 240	42.4 x 33.7, 48.3 x 33.7, 48.3 x 42.4, 60.3 x 33.7, 60.3 x 42.4, 60.3 x 48.3, 76.1 x 42.4, 76.1 x 48.3, 76.1 x 60.3, 88.9 x 60.3, 88.9 x 76.1, 114.3 x 48.3, 114.3 x 60.3, 114.3 x 76.1, 114.3 x 88.9, 139.7 x 114.3, 165.1 x 88.9, 165.1 x 114.3, 165.1 x 139.7, 168.3 x 114.3, 168.3 x 139.7, 219.1 x 88.9, 219.1 x 114.3, 219.1 x 139.7, 219.1 x 168.3	25	988a/19
Concentric Reducer Threaded Fig 240N	60.3 x 26.9, 60.3 x 33.7, 60.3 x 42.4, 60.3 x 48.3, 76.1 x 42.4, 76.1 x 48.3, 76.1 x 60.3, 88.9 x 60.3, 88.9 x 76.1, 114.3 x 48.3, 114.3 x 60.3, 114.3 x 76.1, 114.3 x 88.9, 139.7 x 114.3, 165.1 x 88.9, 219.1 x 88.9	25	988a/20
Reducing Tee Fig 130R	60.3 x 33.7, 60.3 x 48.3, 76.1 x 48.3, 76.1 x 60.3, 88.9 x 33.7, 88.9 x 48.3, 88.9 x 60.3, 88.9 x 76.1, 114.3 x 33.7, 114.3 x 48.3, 114.3 x 60.3, 114.3 x 76.1, 114.3 x 88.9, 139.7 x 114.3, 165.1 x 88.9, 165.1 x 114.3, 165.1 x 139.7, 168.3 x 60.3, 168.3 x 76.1, 168.3 x 88.9, 168.3 x 114.3, 168.3 x 139.7, 219.1 x 60.3, 219.1 x 88.9, 219.1 x 114.3, 219.1 x 168.3	25	988a/21

Minimax GmbH

Industriestrasse 10/12, D-23840 Bad Oldesloe, Germany

Tel: +49 4531 803 8064 • Fax: +49 4531 803 500

Website: www.minimax.de

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Pipe Couplings

Product Name	Nominal size (mm)	Pipe Outside Diameter (mm)	Pipe Ends	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.
Type 900	25	33.7	R&C	EPDM	20	1118b/01
	32	42.4	R&C	EPDM	21	
	40	48.3	R&C	EPDM	21	
	50	60.3	R&C	EPDM	21	
	65	73.0	R&C	EPDM	21	
	65	76.1	R&C	EPDM	21	
	80	88.9	R&C	EPDM	21	
	100	114.3	R&C	EPDM	21	
	125	139.7	R&C	EPDM	21	
	150	165.1	R&C	EPDM	21	
	150	168.3	R&C	EPDM	21	
	200	219.1	R&C	EPDM	21	
	250	273.0	R&C	EPDM	20	
	300	323.9	R&C	EPDM	20	

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PIPE COUPLINGS AND FITTINGS

Product Name	Nominal size (mm)	Pipe Outside Diameter (mm)	Pipe Ends	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.
Type 901	32	42.4	R&C	EPDM	20	1118b/07
	40	48.3	R&C	EPDM	20	
	50	60.3	R&C	EPDM	20	
	65	76.1	R&C	EPDM	20	
	80	88.9	R&C	EPDM	20	
	100	114.3	R&C	EPDM	20	
	125	139.7	R&C	EPDM	20	
	150	165.1	R&C	EPDM	20	
	150	168.3	R&C	EPDM	20	
	200	219.1	R&C	EPDM	20	

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Pipe Fittings

Product Name	Model No.	Pipe Outside Diameter (mm)	Maximum Working Pressure (bar)	LPCB Ref. No.
90° elbow	910	33.7, 42.4, 48.3, 273.0	20	1118b/02
Short Radius 90° elbow	910S	60.3, 73.0, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	20	1118b/08
Long Radius 90° elbow	910LR	114.3	20	1118b/09
45° elbow	920	42.4, 48.3, 60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1, 273.0	20	1118b/03
tee	930	33.7, 42.4, 48.3, 273.0	20	1118b/04
Short Radius tee	930S	60.3, 73.0, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	20	1118b/10
Pitcher-tee cap	935	114.3 x 114.3 x 88.9 G2.1/2 thread	20	1118b/11
	940	33.7, 42.4, 48.3, 60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1, 273.0	20	1118b/05
	941	60.3, 73.0, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1, 273.0	20	1118b/06

Project Fire Products Limited

Pasturefields Lane Industrial Estate, Pasturefields Lane, Hixon, Staffordshire ST18 0PH, United Kingdom

Tel: +44 (0)01889 271271 • Fax: +44 (0)845 2800116

E-mail: info@projectfire.co.uk • Website: www.projectfireproducts.co.uk

Certificate No: 060c to LPS 1219

Live Tap Mechanical Tees

Product Name	Nominal Size (m)	Pipe Ends	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.
Model LT-KD-002 (Kwik-Drain) (Note 2)	50 x 25.4	T	EPDM	12	060c/01
Model LT-KD-002 (Kwik Drain) (Note 2)	65 x 25.4	T	EPDM	12	
	80 x 25.4	T	EPDM	12	
	100 x 25.4	T	EPDM	12	
	150 x 25.4	T	EPDM	12	
Model LT-KD-50-002 (Kwik-Drain 50mm outlet) (Note 2)	80 x 50.8	T	EPDM	12	
	100 x 50.8	T	EPDM	12	
	150 x 50.8	T	EPDM	12	
Model LT-KD-SA-001 (Kwik-Drain S.A.) (Note 2)	50 x 25.4	T	EPDM	12	
	65 x 25.4	T	EPDM	12	
	80 x 25.4	T	EPDM	12	
	100 x 25.4	T	EPDM	12	
	150 x 25.4	T	EPDM	12	
Model LT-NDT(50)-002 (No-Drain-T) (Note 3 & 4)	50 x 32	T	EPDM	12	060c/02
	65 x 40	T	EPDM	12	
Model LT-NDT (50)-002 (No Drain-T) (Note 3 & 4)	80 x 50.8	T	EPDM	12	
	100 x 50.8	T	EPDM	12	
	150 x 50.8	T	EPDM	12	

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PIPE COUPLINGS AND FITTINGS

Product Name	Nominal Size (m)	Pipe Ends	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.
Model LT-KC(15-32)-002 (Kwik-Clamp) (Note 2)	32 x 15	T	EPDM	12	060c/03
Model LT-KC(15-40)-002 (Kwik-Clamp) (Note 2)	40 x 15	T	EPDM	12	
Model LT-KC(15-50)-002 (Kwik-Clamp) (Note 2)	50 x 15	T	EPDM	12	
Model LT-KV-SA-001 (Kwik-Vent S.A.) (Note 2)	32 x 15	T	EPDM	12	060c/06
	40 x 15	T	EPDM	12	
	50 x 15	T	EPDM	12	

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Model LT-C-100-80 (No-Drain-T) Grooved Outlet

Product Name	Nominal Size (m)	Pipe Ends	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.
Model LT-C-100-80 (No-Drain-T)	100 x 80	G	EPDM	12	060d/01

Shandong Lede Machinery Co. Ltd.

No. 3998 West Waihuan N. Road, Weicheng District, Weifang City, Shandong Province 261057, China

Tel: +0086 536 816 7992 • Fax: +0086 536 816 7916

E-mail: approval@ledegroup.cn

Certificate No: 1433a to LPS 1219: Issue 3.1

`LEDE` and `PREM` Pipe Couplings

Product Name	Nominal Size (mm)	Pipe Outside Diameter (mm)	Pipe End Connections	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.
Rigid Coupling 1512	25	33.7	Cut & Rolled	EPDM	20	1433a/01
	32	42.4	Cut & Rolled	EPDM	20	
	40	48.3	Cut & Rolled	EPDM	20	
	50	60.3	Cut & Rolled	EPDM	20	
	65	76.1	Cut & Rolled	EPDM	20	
	80	88.9	Cut & Rolled	EPDM	20	
	100	114.3	Cut & Rolled	EPDM	20	
	125	139.7	Cut & Rolled	EPDM	20	
	150	165.1	Cut & Rolled	EPDM	20	
	150	168.3	Cut & Rolled	EPDM	20	
	200	219.1	Cut & Rolled	EPDM	20	
Flexible Coupling 1212	25	33.7	Cut & Rolled	EPDM	20	1433a/02
	32	42.4	Cut & Rolled	EPDM	20	
	40	48.3	Cut & Rolled	EPDM	20	
	50	60.3	Cut & Rolled	EPDM	20	
	65	76.1	Cut & Rolled	EPDM	20	
	80	88.9	Cut & Rolled	EPDM	20	
	100	114.3	Cut & Rolled	EPDM	20	
	125	139.7	Cut & Rolled	EPDM	20	
	150	165.1	Cut & Rolled	EPDM	20	
	150	168.3	Cut & Rolled	EPDM	20	
	200	219.1	Cut & Rolled	EPDM	20	
Grooved Mechanical Tee 4102	50 x 32	60.3 x 42.4	Cut & Rolled	EPDM	20	1433a/03
	50 x 40	60.3 x 48.3	Cut & Rolled	EPDM	20	
	65 x 32	76.1 x 42.4	Cut & Rolled	EPDM	20	
	65 x 40	76.1 x 48.3	Cut & Rolled	EPDM	20	
	80 x 32	88.9 x 42.4	Cut & Rolled	EPDM	20	
	80 x 40	88.9 x 48.3	Cut & Rolled	EPDM	20	
	80 x 50	88.9 x 60.3	Cut & Rolled	EPDM	16	
	100 x 32	114.3 x 42.4	Cut & Rolled	EPDM	20	
	100 x 40	114.3 x 48.3	Cut & Rolled	EPDM	20	
	100 x 50	114.3 x 60.3	Cut & Rolled	EPDM	20	

PART 3: SECTION 8.1

PIPE COUPLINGS AND FITTINGS

Product Name	Nominal Size (mm)	Pipe Outside Diameter (mm)	Pipe End Connections	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.		
Threaded Mechanical Tee 4202	100 x 65	114.3 x 76.1	Cut & Rolled	EPDM	20	1433a/04		
	100 x 80	114.3 x 88.9	Cut & Rolled	EPDM	16			
	125 x 32	139.7 x 42.4	Cut & Rolled	EPDM	20			
	125 x 40	139.7 x 48.3	Cut & Rolled	EPDM	20			
	125 x 50	139.7 x 60.3	Cut & Rolled	EPDM	20			
	125 x 60	139.7 x 76.1	Cut & Rolled	EPDM	20			
	125 x 80	139.7 x 88.9	Cut & Rolled	EPDM	16			
	150 x 50	165.1 x 60.3	Cut & Rolled	EPDM	20			
	150 x 65	165.1 x 76.1	Cut & Rolled	EPDM	20			
	150 x 80	165.1 x 88.9	Cut & Rolled	EPDM	20			
	150 x 32	168.3 x 42.4	Cut & Rolled	EPDM	20			
	150 x 40	168.3 x 48.3	Cut & Rolled	EPDM	20			
	150 x 50	168.3 x 60.3	Cut & Rolled	EPDM	20			
	150 x 65	168.3 x 76.1	Cut & Rolled	EPDM	20			
	150 x 80	168.3 x 88.9	Cut & Rolled	EPDM	20			
	200 x 50	219.1 x 60.3	Cut & Rolled	EPDM	20			
	200 x 65	219.1 x 76.1	Cut & Rolled	EPDM	20			
	200 x 80	219.1 x 88.9	Cut & Rolled	EPDM	16			
	50 x 25	60.3 x 33.7	Cut & Rolled	EPDM	20			
	Small Mechanical Tee L922	50 x 32	60.3 x 42.4	Cut & Rolled	EPDM		20	1433a/05
		50 x 40	60.3 x 48.3	Cut & Rolled	EPDM		20	
		65 x 25	76.1 x 33.7	Cut & Rolled	EPDM		20	
		65 x 32	76.1 x 42.4	Cut & Rolled	EPDM		20	
		65 x 40	76.1 x 48.3	Cut & Rolled	EPDM		20	
		80 x 25	88.9 x 33.7	Cut & Rolled	EPDM		20	
		80 x 32	88.9 x 42.4	Cut & Rolled	EPDM		20	
		80 x 40	88.9 x 48.3	Cut & Rolled	EPDM		20	
		80 x 50	88.9 x 60.3	Cut & Rolled	EPDM		16	
		100 x 25	114.3 x 33.7	Cut & Rolled	EPDM		20	
		100 x 32	114.3 x 42.4	Cut & Rolled	EPDM		20	
		100 x 40	114.3 x 48.3	Cut & Rolled	EPDM		20	
		100 x 50	114.3 x 60.3	Cut & Rolled	EPDM		20	
100 x 65		114.3 x 76.1	Cut & Rolled	EPDM	20			
125 x 25		139.7 x 33.7	Cut & Rolled	EPDM	20			
125 x 32		139.7 x 42.4	Cut & Rolled	EPDM	20			
125 x 40		139.7 x 48.3	Cut & Rolled	EPDM	20			
125 x 50		139.7 x 60.3	Cut & Rolled	EPDM	20			
150 x 25		165.1 x 33.7	Cut & Rolled	EPDM	20			
150 x 32		165.1 x 42.4	Cut & Rolled	EPDM	20			
150 x 40		165.1 x 48.3	Cut & Rolled	EPDM	20			
150 x 50		165.1 x 60.3	Cut & Rolled	EPDM	20			
150 x 65		165.1 x 76.1	Cut & Rolled	EPDM	20			
150 x 80		165.1 x 88.9	Cut & Rolled	EPDM	20			
150 x 32		168.3 x 42.4	Cut & Rolled	EPDM	20			
150 x 40		168.3 x 48.3	Cut & Rolled	EPDM	20			
150 x 50		168.3 x 60.3	Cut & Rolled	EPDM	20			
150 x 65		168.3 x 76.1	Cut & Rolled	EPDM	20			
150 x 80		168.3 x 88.9	Cut & Rolled	EPDM	20			
200 x 25		219.1 x 33.7	Cut & Rolled	EPDM	20			
200 x 32		219.1 x 42.4	Cut & Rolled	EPDM	20			
200 x 40		219.1 x 48.3	Cut & Rolled	EPDM	20			
200 x 50	219.1 x 60.3	Cut & Rolled	EPDM	20				
200 x 65	219.1 x 76.1	Cut & Rolled	EPDM	20				
200 x 80	219.1 x 88.9	Cut & Rolled	EPDM	16				
25 x 15	33.7 x 21.3	Cut & Rolled	EPDM	20				
32 x 15	42.4 x 21.3	Cut & Rolled	EPDM	20				
32 x 20	42.4 x 26.7	Cut & Rolled	EPDM	20				
32 x 25	42.4 x 33.7	Cut & Rolled	EPDM	20				
40 x 15	48.3 x 21.3	Cut & Rolled	EPDM	20				
40 x 20	48.3 x 26.7	Cut & Rolled	EPDM	20				
40 x 25	48.3 x 33.7	Cut & Rolled	EPDM	20				
50 x 15	60.3 x 21.3	Cut & Rolled	EPDM	20				
50 x 20	60.3 x 26.9	Cut & Rolled	EPDM	20				
50 x 25	60.3 x 33.7	Cut & Rolled	EPDM	20				
60 x 15	76.1 x 21.3	Cut & Rolled	EPDM	20				
60 x 20	76.1 x 26.9	Cut & Rolled	EPDM	20				
65 x 25	76.1 x 33.7	Cut & Rolled	EPDM	20				

PART 3: SECTION 8.1
PIPE COUPLINGS AND FITTINGS

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'LEDE' and 'PREM' Pipe Fittings

Product Name	Nominal Size (mm)	Maximum Working Pressure (bar)	LPCB Ref. No.
90° Elbow L01	33.7, 42.4, 48.3	20	1433a/06
90° Elbow XGQT01	60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	20	1433a/07
45° Elbow 011	33.7, 42.4, 48.3	20	1433a/08
45° Elbow XGQT011	60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	20	1433a/09
Grooved Tee XGQT03	33.7, 42.4, 48.3, 60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	20	1433a/10
Grooved End Cap XGQT06	33.7, 42.4, 48.3, 60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	20	1433a/11
Grooved Cap with Hole XGQT061	60.3 x 33.7, 60.3 x 42.4, 60.3 x 48.3, 76.1 x 33.7, 76.1 x 42.4, 76.1 x 48.3, 76.1 x 60.3, 88.9 x 33.7, 88.9 x 42.4, 88.9 x 48.4, 88.9 x 60.3, 114.3 x 48.3, 114.3 x 60.3, 139.7 x 60.3, 165.1 x 60.3, 168.3 x 60.3, 219.1 x 60.3	20	1433a/12
Grooved Flange Adaptor XGQT08	60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	16	1433a/13
Grooved concentric Reducer XGQT07	48.3 x 42.4, 60.3 x 48.3, 76.1 x 60.3, 88.9 x 76.1, 114.3 x 88.9, 139.7 x 114.3, 165.1 x 139.7, 168.3 x 139.7, 219.1 x 165.1, 219.1 x 168.3	20	1433a/14

Shield Fire, Safety & Security Ltd

Genesis, Unit 3, Endeavour Drive, Basildon SS14 3WF, United Kingdom
Tel: 01708 377 731 • Fax: 01708 347 637
E-mail: shielduk@shieldglobal.com • Website: www.shieldglobal.com

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'SHIELD' Pipe Couplings

Product Name	Nominal Size (mm)	Pipe Outside Diameter (mm)	Pipe Ends	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.
SDG 25 Flexible Coupling	25	33.7	R&C	EPDM	25	988Da/01
	32	42.4	R&C	EPDM	25	
	40	48.3	R&C	EPDM	25	
	50	60.3	R&C	EPDM	25	
	65	73.0	R&C	EPDM	25	
	65	76.1	R&C	EPDM	25	
	80	88.9	R&C	EPDM	25	
	100	108.0	R&C	EPDM	25	
	100	114.3	R&C	EPDM	25	
	125	133.0	R&C	EPDM	25	
	125	139.7	R&C	EPDM	25	
	125	141.3	R&C	EPDM	25	
	150	159.0	R&C	EPDM	25	
	150	165.1	R&C	EPDM	25	
	150	168.3	R&C	EPDM	25	
	200	219.1	R&C	EPDM	25	
	SDG 22 Rigid Coupling	25	33.7	R&C	EPDM	
32		42.4	R&C	EPDM	25	
40		48.3	R&C	EPDM	25	
50		60.3	R&C	EPDM	25	
65		73.0	R&C	EPDM	25	
65		76.1	R&C	EPDM	25	
80		88.9	R&C	EPDM	25	
100		108.0	R&C	EPDM	25	
100		114.3	R&C	EPDM	25	
125		133.0	R&C	EPDM	25	
125		139.7	R&C	EPDM	25	
125		141.3	R&C	EPDM	25	
150		159.0	R&C	EPDM	25	

PART 3: SECTION 8.1

PIPE COUPLINGS AND FITTINGS

Product Name	Nominal Size (mm)	Pipe Outside Diameter (mm)	Pipe Ends	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.		
SDG 30 Reducing Flexible Coupling	150	165.1	R&C	EPDM	25	988Da/03		
	150	168.3	R&C	EPDM	25			
	200	219.1	R&C	EPDM	25			
	50 x 32	60.3 x 42.4	R&C	EPDM	16			
	50 x 40	60.3 x 48.3	R&C	EPDM	16			
	65 x 50	73.0 x 60.3	R&C	EPDM	16			
	65 x 40	76.1 x 48.3	R&C	EPDM	16			
	65 x 50	76.1 x 60.3	R&C	EPDM	16			
	80 x 50	88.9 x 60.3	R&C	EPDM	16			
	80 x 65	88.9 x 73.0	R&C	EPDM	16			
	80 x 65	88.9 x 76.1	R&C	EPDM	16			
	100 x 50	114.3 x 60.3	R&C	EPDM	16			
	100 x 65	114.3 x 73.0	R&C	EPDM	16			
	100 x 65	114.3 x 76.1	R&C	EPDM	16			
	100 x 80	114.3 x 88.9	R&C	EPDM	16			
SDG 20 Light Duty Rigid Coupling	150 x 100	165.1 x 114.3	R&C	EPDM	16	988Da/04		
	150 x 100	168.3 x 114.3	R&C	EPDM	16			
	200 x 150	219.1 x 165.1	R&C	EPDM	16			
	200 x 150	219.1 x 168.3	R&C	EPDM	16			
	65	76.1	R&C	EPDM	16			
	80	88.9	R&C	EPDM	16			
	100	108.0	R&C	EPDM	16			
	100	114.3	R&C	EPDM	16			
	125	139.7	R&C	EPDM	16			
	125	141.3	R&C	EPDM	16			
	150	159.0	R&C	EPDM	16			
	150	165.1	R&C	EPDM	16			
	150	168.3	R&C	EPDM	16			
	200	219.1	R&C	EPDM	16			
	SDG 42 Threaded Mechanical Tee	100 x 65	114.3 x 76.1	T	EPDM		16	988Da/05
100 x 80		114.3 x 88.9	T	EPDM	16			
125 x 65		139.7 x 76.1	T	EPDM	16			
125 x 80		139.7 x 88.9	T	EPDM	16			
125 x 100		139.7 x 114.3	T	EPDM	16			
150 x 65		165.1 x 76.1	T	EPDM	16			
150 x 80		165.1 x 88.9	T	EPDM	16			
150 x 100		165.1 x 114.3	T	EPDM	16			
150 x 65		168.3 x 76.1	T	EPDM	16			
150 x 80		168.3 x 88.9	T	EPDM	16			
150 x 100		168.3 x 114.3	T	EPDM	16			
200 x 65		219.1 x 76.1	T	EPDM	16			
200 x 80		219.1 x 88.9	T	EPDM	16			
200 x 100		219.1 x 114.3	T	EPDM	16			
100 x 65		114.3 x 76.1	G	EPDM	16			
SDG 44 Grooved Mechanical Tee		100 x 80	114.3 x 88.9	G	EPDM	16	988Da/06	
		125 x 65	139.7 x 76.1	G	EPDM	16		
		125 x 80	139.7 x 88.9	G	EPDM	16		
		125 x 100	139.7 x 114.3	G	EPDM	16		
		150 x 65	165.1 x 76.1	G	EPDM	16		
	150 x 80	165.1 x 88.9	G	EPDM	16			
	150 x 100	165.1 x 114.3	G	EPDM	16			
	150 x 65	168.3 x 76.1	G	EPDM	16			
	150 x 80	168.3 x 88.9	G	EPDM	16			
	150 x 100	168.3 x 114.3	G	EPDM	16			
	200 x 65	219.1 x 76.1	G	EPDM	16			
	200 x 80	219.1 x 88.9	G	EPDM	16			
	200 x 100	219.1 x 114.3	G	EPDM	16			
	SDG 15 Grooved Flange	40	48.3	R&C	EPDM	16		988Da/08
		50	60.3	R&C	EPDM	16		
65		76.1	R&C	EPDM	16			
80		88.9	R&C	EPDM	16			
100		114.3	R&C	EPDM	16			
125		139.7	R&C	EPDM	16			
150		165.1	R&C	EPDM	16			
150		168.3	R&C	EPDM	16			
200		219.1	R&C	EPDM	16			

PART 3: SECTION 8.1
PIPE COUPLINGS AND FITTINGS

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'SHIELD' Pipe Fittings

Product Name	Pipe Outside Diameter (mm)	Maximum Working Pressure (bar)	LPCB Ref. No.
SDG 100 90° Elbow	33.7, 42.4, 48.3, 60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	25	988Da/09
SDG 105 Short Style 90° Elbow	60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	16	988Da/10
SDG 12 Tee	33.7, 42.4, 48.3, 60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	25	988Da/11
SDG 102 Short Style Tee	60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	16	988Da/12
SDG 200 45° Elbow	33.7, 42.4, 48.3, 60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	25	988Da/13
SDG 14 Cap	33.7, 42.4, 48.3, 60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	25	988Da/14
SDG 13 Cross	42.4, 48.3, 60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	25	988Da/15
SDG 225 22.5° Elbow	76.1, 88.9, 114.3, 139.7, 165.1, 219.1	25	988Da/16
SDG 112 11.25° Elbow	60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 219.1	25	988Da/17
SDG 16	33.7, 42.4, 48.3, 60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	16	988Da/18
Adaptor Flange			
SDG 35 Concentric Reducer Grooved	42.4 x 33.7, 48.3 x 42.4, 60.3 x 48.3, 76.1 x 60.3, 88.9 x 76.1, 114.3 x 88.9, 139.7 x 114.3, 165.1 x 139.7, 168.3 x 139.7, 219.1 x 168.3	25	988Da/19
SDG 37 Concentric Reducer Threaded	60.3 x 48.3, 76.1 x 60.3, 88.9 x 76.1, 114.3 x 88.9, 139.7 x 114.3	25	988Da/20
SDG 53 Reducing Tee	60.3 x 33.7, 60.3 x 48.3, 76.1 x 48.3, 76.1 x 60.3, 88.9 x 33.7, 88.9 x 48.3, 88.9 x 60.3, 88.9 x 76.1, 114.3 x 33.7, 114.3 x 48.3, 114.3 x 60.3, 114.3 x 76.1, 114.3 x 88.9, 139.7 x 114.3, 165.1 x 88.9, 165.1 x 114.3, 165.1 x 139.7, 168.3 x 60.3, 168.3 x 76.1, 168.3 x 88.9, 168.3 x 114.3, 168.3 x 139.7, 219.1 x 60.3, 219.1 x 88.9, 219.1 x 114.3, 219.1 x 168.3	25	988Da/21

Tung Shing Hardware Company Limited

Basement, 14 Sze Shan Street, Yau Tong Bay, Kowloon, Hong Kong

Tel: +852 2626 9983 • Fax: +852 2411 1080

E-mail: tscoldt@tscoldt.com.hk • Website: www.tungshinghardware.com.hk

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Pipe Couplings (AQUILA)

Product Name	Nominal Size	Pipe Outside Diameter (mm)	Pipe Ends	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.
1N - Flexible Coupling	25	33.7	R&C	EPDM	25	988Ba/01
	32	42.4	R&C	EPDM	25	
	40	48.3	R&C	EPDM	25	
	50	60.3	R&C	EPDM	25	
	65	73.0	R&C	EPDM	25	
	65	76.1	R&C	EPDM	25	
	80	88.9	R&C	EPDM	25	
	100	108.0	R&C	EPDM	25	
	100	114.3	R&C	EPDM	25	
	125	133.0	R&C	EPDM	25	
	125	139.7	R&C	EPDM	25	
	125	141.3	R&C	EPDM	25	
	150	159.0	R&C	EPDM	25	
	150	165.1	R&C	EPDM	25	
	150	168.3	R&C	EPDM	25	
	200	219.1	R&C	EPDM	25	
1G - Rigid Coupling	25	33.7	R&C	EPDM	25	988Ba/02

PART 3: SECTION 8.1

PIPE COUPLINGS AND FITTINGS

Product Name	Nominal Size	Pipe Outside Diameter (mm)	Pipe Ends	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.
	32	42.4	R&C	EPDM	25	
	40	48.3	R&C	EPDM	25	
	50	60.3	R&C	EPDM	25	
	65	73.0	R&C	EPDM	25	
	65	76.1	R&C	EPDM	25	
	80	88.9	R&C	EPDM	25	
	100	108.0	R&C	EPDM	25	
	100	114.3	R&C	EPDM	25	
	125	133.0	R&C	EPDM	25	
	125	139.7	R&C	EPDM	25	
	125	141.3	R&C	EPDM	25	
	150	159.0	R&C	EPDM	25	
	150	165.1	R&C	EPDM	25	
	150	168.3	R&C	EPDM	25	
	200	219.1	R&C	EPDM	25	
1GS - Light Duty Rigid Coupling	65	76.1	R&C	EPDM	16	988Ba/04
	80	88.9	R&C	EPDM	16	
	100	108.0	R&C	EPDM	16	
	100	114.3	R&C	EPDM	16	
	125	139.7	R&C	EPDM	16	
	125	141.3	R&C	EPDM	16	
	150	159.0	R&C	EPDM	16	
	150	165.1	R&C	EPDM	16	
	150	168.3	R&C	EPDM	16	
	200	219.1	R&C	EPDM	16	
3J - Mechanical Tee, Threaded Outlet	100 x 65	114.3 x 76.1	T	EPDM	16	988Ba/05
	100 x 80	114.3 x 88.9	T	EPDM	16	
	125 x 65	139.7 x 76.1	T	EPDM	16	
	125 x 80	139.7 x 88.9	T	EPDM	16	
	125 x 100	139.7 x 114.3	T	EPDM	16	
	150 x 65	165.1 x 76.1	T	EPDM	16	
	150 x 80	165.1 x 88.9	T	EPDM	16	
	150 x 100	165.1 x 114.3	T	EPDM	16	
	150 x 65	168.3 x 76.1	T	EPDM	16	
	150 x 80	168.3 x 88.9	T	EPDM	16	
	150 x 100	168.3 x 114.3	T	EPDM	16	
	200 x 65	219.1 x 76.1	T	EPDM	16	
	200 x 80	219.1 x 88.9	T	EPDM	16	
	200 x 100	219.1 x 114.3	T	EPDM	16	
3G - Mechanical Tee, Grooved Outlet	100 x 65	114.3 x 76.1	G	EPDM	16	988Ba/06
	100 x 80	114.3 x 88.9	G	EPDM	16	
	125 x 65	139.7 x 76.1	G	EPDM	16	
	125 x 80	139.7 x 88.9	G	EPDM	16	
	125 x 100	139.7 x 114.3	G	EPDM	16	
	150 x 65	165.1 x 76.1	G	EPDM	16	
	150 x 80	165.1 x 88.9	G	EPDM	16	
	150 x 100	165.1 x 114.3	G	EPDM	16	
	150 x 65	168.3 x 76.1	G	EPDM	16	
	150 x 80	168.3 x 88.9	G	EPDM	16	
	150 x 100	168.3 x 114.3	G	EPDM	16	
	200 x 65	219.1 x 76.1	G	EPDM	16	
	200 x 80	219.1 x 88.9	G	EPDM	16	
	200 x 100	219.1 x 114.3	G	EPDM	16	
321 - Grooved Flange	40	48.3	R&C	EPDM	16	988Ba/08
	50	60.3	R&C	EPDM	16	
	65	76.1	R&C	EPDM	16	
	80	88.9	R&C	EPDM	16	
	100	114.3	R&C	EPDM	16	
	125	139.7	R&C	EPDM	16	
	150	165.1	R&C	EPDM	16	
	150	168.3	R&C	EPDM	16	
	200	219.1	R&C	EPDM	16	

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PART 3: SECTION 8.1
PIPE COUPLINGS AND FITTINGS

Pipe Fittings (AQUILA)

Product Name	Pipe Outside Diameter (mm)	Max Working Pressure (bar)	LPCB Ref. No.
90 - 90° Elbow	33.7 , 42.4, 48.3, 60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	25	988Ba/09
90S - 90° Short Elbow	60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	16	988Ba/10
130 - Tee	33.7 , 42.4, 48.3, 60.3, 76.1, 88.9, 114.3, 139.7, 165.1,168.3, 219.1	25	988Ba/11
130S - Short Tee	60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	16	988Ba/12
120 - 45° Elbow	33.7 , 42.4, 48.3, 60.3, 76.1, 88.9, 114.3, 139.7, 165.1,168.3, 219.1	25	988Ba/13
300 - Cap	33.7 , 42.4, 48.3, 60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	25	988Ba/14
180 - Cross	42.4, 48.3, 60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	25	988Ba/15
110 - 22.5° Elbow	76.1, 88.9, 114.3, 139.7, 165.1, 219.1	25	988Ba/16
105 - 11.25° Elbow	60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 219.1	25	988Ba/17
321G - Grooved Flange Adaptor	33.7 , 42.4, 48.3, 60.3, 76.1, 88.9, 114.3, 139.7, 165.1, 168.3, 219.1	16	988Ba/18
240 - Grooved Concentric Reducer	42.4 x 33.7, 48.3 x 33.7, 48.3 x 42.4, 60.3 x 33.7, 60.3 x 42.4, 60.3 x 48.3, 76.1 x 42.4, 76.1 x 48.3, 76.1 x 60.3, 88.9 x 60.3, 88.9 x 76.1, 114.3 x 48.3, 114.3 x 60.3, 114.3 x 76.1, 114.3 x 88.9, 139.7 x 114.3, 165.1 x 88.9, 165.1 x 114.3, 165.1 x 139.7, 168.3 x 114.3, 168.3 x 139.7, 219.1 x 88.9, 219.1 x 114.3, 219.1 x 139.7, 219.1 x 168.3	25	988Ba/19
240N - Female Threaded Concentric Reducer	60.3 x 26.9, 60.3 x 33.7, 60.3 x 42.4, 60.3 x 48.3, 76.1 x 42.4, 76.1 x 48.3, 76.1 x 60.3, 88.9 x 60.3, 88.9 x 76.1, 114.3 x 48.3, 114.3 x 60.3, 114.3 x 76.1, 114.3 x 88.9, 139.7 x 114.3, 165.1 x 88.9, 219.1 x 88.9	25	988Ba/20
130R - Reducing Tee	60.3 x 33.7, 60.3 x 48.3, 76.1 x 48.3, 76.1 x 60.3, 88.9 x 33.7, 88.9 x 48.3, 88.9 x 60.3, 88.9 x 76.1, 114.3 x 33.7, 114.3 x 48.3, 114.3 x 60.3, 114.3 x 76.1, 114.3 x 88.9, 139.7 x 114.3, 165.1 x 88.9, 165.1 x 114.3, 165.1 x 139.7, 168.3 x 60.3, 168.3 x 76.1, 168.3 x 88.9, 168.3 x 114.3, 168.3 x 139.7, 219.1 x 60.3, 219.1 x 88.9, 219.1 x 114.3, 219.1 x 168.3	25	988Ba/21

Tyco Fire & Building Products (Part of the Johnson Control Group of Companies (Cranston))

Research & Development Center, 1467 Elmwood Avenue, Cranston, RI 02910, USA

Tel: +1 401 781 8220 • Fax: +1 401 781 7317

E-mail: Bob.Bandura@jci.com

Certificate No: 921a to LPS 1219: Issue 3.1

'Grinnell' Pipe Couplings

Product Name	Nominal Size (mm)	Pipe Outside Diameter (mm)	Pipe Ends	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.
Fig 705 Flexible Pipe Coupling	32	42.2	Rolled	EPDM	20	921a/01
	40	48.3	Rolled	EPDM	20	
	50	60.3	Rolled	EPDM	20	
	65	76.1	Rolled	EPDM	20	
	80	88.9	Rolled	EPDM	20	
	100	114.3	Rolled	EPDM	20	
	150	165.1	Rolled	EPDM	20	
	150	168.3	Rolled	EPDM	20	
	200	219.1	Rolled	EPDM	20	
	Fig 707 Heavy Duty Flexible Pipe Coupling	40	48.3	Rolled	EPDM	
50		60.3	Rolled	EPDM	20	
65		76.1	Rolled	EPDM	20	
80		88.9	Rolled	EPDM	20	
100		114.3	Rolled	EPDM	20	
150		165.1	Rolled	EPDM	20	
150		168.3	Rolled	EPDM	20	
200		219.1	Rolled	EPDM	20	
250		273.0	Rolled	EPDM	20	
300		323.9	Rolled	EPDM	20	
Fig 577 Rigid Pipe Coupling	25	33.7	Rolled	EPDM	20	921a/02

PART 3: SECTION 8.1

PIPE COUPLINGS AND FITTINGS

Product Name	Nominal Size (mm)	Pipe Outside Diameter (mm)	Pipe Ends	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.		
Fig 772 Rigid Pipe Coupling	32	42.2	Rolled	EPDM	20	921a/03		
	40	48.3	Rolled	EPDM	20			
	50	60.3	Rolled	EPDM	20			
	65	76.1	Rolled	EPDM	20			
	80	88.9	Rolled	EPDM	20			
	100	114.3	Rolled	EPDM	20			
	150	165.1	Rolled	EPDM	20			
	150	168.3	Rolled	EPDM	20			
	200	219.1	Rolled	EPDM	20			
	250	273.0	Rolled	EPDM	20			
	300	323.9	Rolled	EPDM	20			
	32	42.2	Rolled	EPDM	20			
	Fig 774 Rigid Pipe Coupling	40	48.3	Rolled	EPDM		20	921a/24
50		60.3	Rolled	EPDM	20			
65		76.1	Rolled	EPDM	20			
80		88.9	Rolled	EPDM	20			
100		114.3	Rolled	EPDM	20			
150		165.1	Rolled	EPDM	20			
150		168.3	Rolled	EPDM	20			
200		219.1	Rolled	EPDM	20			
250		273	Rolled	EPDM	20			
300		323.9	Rolled	EPDM	20			
25		33.7	Rolled	EPDM	20			
Fig 579 Rigid Pipe Coupling		32	42.2	Rolled	EPDM	20	921a/25	
		40	48.3	Rolled	EPDM	20		
	50	60.3	Rolled	EPDM	20			
	65	76.1	Rolled	EPDM	20			
	80	88.9	Rolled	EPDM	20			
	100	114.3	Rolled	EPDM	20			
	150	165.1	Rolled	EPDM	20			
	150	168.3	Rolled	EPDM	20			
	200	219.1	Rolled	EPDM	20			
	250	273.0	Rolled	EPDM	20			
	300	323.9	Rolled	EPDM	20			
	32	42.2	Rolled	EPDM	20			
	Fig 716 Reducing Coupling	40	48.3	Rolled	EPDM	20		921a/05
50		60.3	Rolled	EPDM	20			
65		76.1	Rolled	EPDM	20			
80		88.9	Rolled	EPDM	20			
100		114.3	Rolled	EPDM	20			
Fig 730 Mechanical Tee	50 x 40	60.3 x 48.3	Rolled	EPDM	20	921a/04		
	65 x 50	76.1 x 60.3	Rolled	EPDM	20			
Fig 730 Mechanical Tee	80 x 65	88.9 x 76.1	Rolled	EPDM	20	921a/04		
	100 x 80	114.3 x 88.9	Rolled	EPDM	20			
	50 x 15	60.3 x 21.3	Threaded	EPDM	20			
	50 x 20	60.3 x 26.9	Threaded	EPDM	20			
	50 x 25	60.3 x 33.4	Threaded	EPDM	20			
	50 x 32	60.3 x 42.2	Threaded	EPDM	20			
	50 x 40	60.3 x 48.3	Threaded	EPDM	20			
	65 x 15	76.1 x 21.3	Threaded	EPDM	20			
	65 x 20	76.1 x 26.9	Threaded	EPDM	20			
	65 x 25	76.1 x 33.4	Threaded	EPDM	20			
	65 x 32	76.1 x 42.2	Threaded	EPDM	20			
	65 x 40	76.1 x 48.3	Threaded	EPDM	20			
	65 x 50	76.1 x 60.3	Threaded	EPDM	20			
	80 x 20	88.9 x 26.9	Threaded	EPDM	20			
	80 x 15	88.9 x 21.3	Threaded	EPDM	20			
	80 x 25	88.9 x 33.4	Threaded	EPDM	20			
	80 x 32	88.9 x 42.2	Threaded	EPDM	20			
	80 x 40	88.9 x 48.3	Threaded	EPDM	20			
	80 x 50	88.9 x 60.3	Threaded	EPDM	20			
	100 x 15	114.3 x 21.3	Threaded	EPDM	20			
	100 x 20	114.3 x 26.9	Threaded	EPDM	20			
	100 x 25	114.3 x 33.4	Threaded	EPDM	20			
	100 x 32	114.3 x 42.2	Threaded	EPDM	20			
	100 x 40	114.3 x 48.3	Threaded	EPDM	20			
	100 x 50	114.3 x 60.3	Threaded	EPDM	20			
	100 x 65	114.3 x 76.1	Threaded	EPDM	20			

PART 3: SECTION 8.1
PIPE COUPLINGS AND FITTINGS

Product Name	Nominal Size (mm)	Pipe Outside Diameter (mm)	Pipe Ends	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.
	100 x 80	114.3 x 88.9	Threaded	EPDM	20	
	150 x 32	165.1 x 42.2	Threaded	EPDM	20	
	150 x 40	165.1 x 48.3	Threaded	EPDM	20	
	150 x 50	165.1 x 60.3	Threaded	EPDM	20	
	150 x 65	165.1 x 76.1	Threaded	EPDM	20	
	150 x 80	165.1 x 88.9	Threaded	EPDM	20	
	150 x 100	165.1 x 114.3	Threaded	EPDM	20	
	150 x 32	168.3 x 42.2	Threaded	EPDM	20	
	150 x 40	168.3 x 48.3	Threaded	EPDM	20	
	150 x 50	168.3 x 60.3	Threaded	EPDM	20	
	150 x 65	168.3 x 76.1	Threaded	EPDM	20	
	150 x 80	168.3 x 88.9	Threaded	EPDM	20	
	150 x 100	168.3 x 114.3	Threaded	EPDM	20	
	200 x 50	219.1 x 60.3	Threaded	EPDM	20	
	200 x 65	219.1 x 76.1	Threaded	EPDM	20	
	200 x 100	219.1 x 114.3	Threaded	EPDM	20	
	200 x 80	219.1 x 88.9	Threaded	EPDM	20	
	50 x 32	60.3 x 42.2	Grooved	EPDM	20	
	50 x 40	60.3 x 48.3	Grooved	EPDM	20	
	65 x 32	76.1 x 42.2	Grooved	EPDM	20	
	65 x 40	76.1 x 48.3	Grooved	EPDM	20	
	65 x 50	76.1 x 60.3	Grooved	EPDM	20	
	80 x 32	88.9 x 42.2	Grooved	EPDM	20	
	80 x 40	88.9 x 48.3	Grooved	EPDM	20	
	80 x 50	88.9 x 60.3	Grooved	EPDM	20	
	100 x 32	114.3 x 42.4	Grooved	EPDM	20	
	100 x 40	114.3 x 48.3	Grooved	EPDM	20	
	100 x 50	114.3 x 60.3	Grooved	EPDM	20	
	100 x 65	114.3 x 76.1	Grooved	EPDM	20	
	100 x 80	114.3 x 88.9	Grooved	EPDM	20	
	150 x 32	165.1 x 42.2	Grooved	EPDM	20	
	150 x 40	165.1 x 48.3	Grooved	EPDM	20	
	150 x 50	165.1 x 60.3	Grooved	EPDM	20	
	150 x 65	165.1 x 76.1	Grooved	EPDM	20	
	150 x 80	165.1 x 88.9	Grooved	EPDM	20	
	150 x 100	165.1 x 114.3	Grooved	EPDM	20	
	150 x 32	168.3 x 42.2	Grooved	EPDM	20	
	150 x 40	168.3 x 48.3	Grooved	EPDM	20	
	150 x 50	168.3 x 60.3	Grooved	EPDM	20	
	150 x 65	168.3 x 76.1	Grooved	EPDM	20	
	150 x 80	168.3 x 88.9	Grooved	EPDM	20	
	150 x 100	168.3 x 114.3	Grooved	EPDM	20	
	200 x 50	219.1 x 60.3	Grooved	EPDM	20	
	200 x 65	219.1 x 76.1	Grooved	EPDM	20	
	200 x 80	219.1 x 88.9	Grooved	EPDM	20	
	200 x 100	219.1 x 114.3	Grooved	EPDM	20	
Fig 522 Sprinkler Tee	25 x 15	33.4 x 21.3	Threaded	EPDM	20	921a/11
	25 x 20	33.4 x 26.9	Threaded	EPDM	20	
	25 x 25	33.4 x 33.4	Threaded	EPDM	20	
	32 x 10	42.2 x 17.2	Threaded	EPDM	20	
	32 x 15	42.2 x 21.3	Threaded	EPDM	20	
	32 x 20	42.2 x 26.9	Threaded	EPDM	20	
	32 x 25	42.2 x 33.4	Threaded	EPDM	20	
	40 x 15	48.3 x 21.3	Threaded	EPDM	20	
	40 x 20	48.3 x 26.9	Threaded	EPDM	20	
	40 x 25	48.3 x 33.4	Threaded	EPDM	20	
	50 x 15	60.3 x 21.3	Threaded	EPDM	20	
	50 x 20	60.3 x 26.9	Threaded	EPDM	20	
	50 x 25	60.3 x 33.4	Threaded	EPDM	20	
	65 x 15	76.1 x 21.3	Threaded	EPDM	20	
	65 x 25	76.1 x 33.4	Threaded	EPDM	20	

Certificate No: 921a to LPS 1219: Issue 3.1

'Grinnell' Pipe Fittings

Product Name	Pipe Outside Diameter (mm)	Maximum Working Pressure (bar)	LPCB Ref. No.
Fig 260 End Cap	42.2, 48.3, 60.3, 76.1, 88.9, 114.3, 165.1, 168.3, 219.1, 273.0, 323.9	20	921a/10

PART 3: SECTION 8.1

PIPE COUPLINGS AND FITTINGS

Product Name	Pipe Outside Diameter (mm)	Maximum Working Pressure (bar)	LPCB Ref. No.
Fig 221 Reducing Tee	219.1x219.1x114.3, 219.1x219.1x168.3	20	921a/15
Fig 212/512 22.5° Elbow	42.2, 48.3, 60.3, 88.9, 114.3, 168.3	20	921a/17
Fig 211/511 11.25° Elbow	42.2, 48.3, 60.3, 88.9, 114.3, 168.3	20	921a/18

Certificate No: 1333a to LPS 1219: Issue 3.1

'Grinnell' Pipe Couplings

Product Name	Nominal Size (mm)	Pipe Outside Diameter (mm)	Pipe Ends	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.
Fig 71 Flange Adapter	50	60.3	Rolled	EPDM	20	1333a/06
	65	76.1	Rolled	EPDM	20	
	80	88.9	Rolled	EPDM	20	
	100	114.3	Rolled	EPDM	20	
	150	165.1	Rolled	EPDM	20	
	150	168.3	Rolled	EPDM	20	
	200	219.1	Rolled	EPDM	20	
	250	273.0	Rolled	EPDM	20	
	300	323.9	Rolled	EPDM	16	

Certificate No: 1333a to LPS 1219: Issue 3.1

'Grinnell' Pipe Fittings

Product Name	Pipe Outside Diameter (mm)	Maximum Working Pressure (bar)	LPCB Ref. No.
Fig 201 / 501 45° Elbow	42.2, 48.3, 60.3, 76.1, 88.9, 114.3, 165.1, 168.3, 219.1, 273.0, 323.9	20	1333a/07
Fig 501 'G-FIRE' 45° Elbow	60.3, 76.1, 88.9, 114.3, 165.1, 168.3, 219.1	20	1333a/21
Fig 210 / 510 90° Elbow	42.2, 48.3, 60.3, 76.1, 88.9, 114.3, 165.1, 168.3, 219.1, 273.0, 323.9	20	1333a/08
Fig 510 'G-FIRE' 90° Elbow	42.2, 48.3, 60.3, 76.1, 88.9, 114.3, 165.1, 168.3, 219.1	20	1333a/22
Fig 219 / 519 Tee	42.2, 48.3, 60.3, 76.1, 88.9, 114.3, 165.1, 168.3, 219.1, 273.0, 323.9	20	1333a/09
Fig 519 'G-FIRE' Tee	42.2, 48.3, 60.3, 76.1, 88.9, 114.3, 165.1, 168.3, 219.1	20	1333a/23
Fig 260 End Cap	42.2, 48.3, 60.3, 76.1, 88.9, 114.3, 165.1, 168.3, 219.1, 273.0, 323.9	20	1333a/10
Fig 250 / 550 Concentric Reducer	42.4 x 33.4, 48.3 x 33.4, 48.3 x 42.2, 60.3 x 42.2, 60.3 x 48.3, 76.1 x 60.3, 88.9 x 76.1, 114.3 x 88.9, 219.1 x 165.1	20	1333a/12
Fig 510S 'G-FIRE' 90° Short Elbow	60.3, 76.1, 88.9, 114.3, 165.1, 168.3, 219.1	20	1333a/13
Fig 519S 'G-FIRE' Short Tee	60.3, 76.1, 88.9, 114.3, 165.1, 168.3, 219.1	20	1333a/14
Fig 221 Reducing Tee	60.3x60.3x48.5, 76.1x76.1x48.3, 76.1x76.1x60.3, 88.9x88.9x33.4, 88.9x88.9x60.3, 88.9x88.9x76.1, 114.3x114.3x60.3, 114.3x114.3x76.1, 114.3x114.3x88.9, 139.7x139.7x88.9, 139.7x139.7x114.3, 165.1x165.1x88.9, 165.1x165.1x114.3, 168.3x168.3x60.3, 168.3x168.3x76.1, 168.3x168.3x88.9, 168.3x168.3x114.3, 168.3x168.3x139.7, 219.1x219.1x139.7, 219.1x219.1x165.1, 273.0x273.0x114.3, 273.0x273.0x168.3, 273.0x273.0x219.1	20	1333a/15
Fig 222 Hydrant Tee	114.3 x 114.3 x 76.1	20	1333a/16
Fig 212 / 512 22.5° Elbow	76.1, 139.7	20	1333a/17
Fig 211 / 511 11.25° Elbow	76.1, 139.7, 165.1	20	1333a/18
Fig 210LR 90° Long Radius Elbow	60.3, 76.1, 88.9, 114.3, 165.1, 168.3, 219.1	20	1333a/19

PART 3: SECTION 8.1
PIPE COUPLINGS AND FITTINGS

Product Name	Pipe Outside Diameter (mm)	Maximum Working Pressure (bar)	LPCB Ref. No.
Fig 227 Cross	42.2, 48.3, 60.3, 76.1, 88.9, 114.3, 139.7, 168.3, 219.1	20	1333a/20

Victaulic Company

4901 Kesslersville Road, Easton, Pennsylvania 18040, USA
Tel: +1 610 559 3300 • Fax: +1 610 250 8817
E-mail: victaulic@victaulic.com • Website: www.victaulic.com

Certificate No: 104p to LPS 1219: Issue 3.1

Style 109 One-bolt coupling

Product Name	Nominal Size (mm)	Pipe Outside Diameter (mm)	Pipe Ends	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.
Style 109 One-bolt coupling	32	42.4	R	EPDM	25	104p/01
	40	48.3	R	EPDM	25	104p/02
	50	60.3	R	EPDM	25	104p/03
	65	76.1	R	EPDM	25	104p/04
	80	88.9	R	EPDM	25	104p/05
	100	114.3	R	EPDM	20	104p/06

Certificate No: 104q to LPS 1219: Issue 3.1

Style 118 Outlet coupling

Product Name	Nominal Size	Pipe Outside Diameter (mm)	Pipe Ends	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.
Style 118 Firelock IGS Installation-Ready Outlet coupling	1	33.7	IGS	EPDM	25	104q/07

Certificate No: 104-1a to LPS 1219: Issue 3.1
Certificate No: 078a to LPS 1219
Certificate No: 491a to LPS 1219

Pipe Couplings

Product Name	Nominal Size (mm)	Pipe Outside Diameter (mm)	Pipe Ends	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.		
Firelock Outlet-Tee Style 922	32 x 15	42.4 x 21.3	T	EPDM	16	491a/27		
	32 x 18	42.4 x 26.9	T	EPDM	16			
	40 x 15	48.3 x 21.3	T	EPDM	16			
	40 x 18	48.3 x 26.9	T	EPDM	16			
	40 x 25	48.3 x 33.7	T	EPDM	16			
	50 x 15	60.3 x 21.3	T	EPDM	16			
	50 x 18	60.3 x 26.9	T	EPDM	16			
	50 x 21	60.3 x 33.7	T	EPDM	16			
	65 x 15	76.1 x 21.3	T	EPDM	16			
	65 x 18	76.1 x 26.9	T	EPDM	16			
	65 x 21	76.1 x 33.7	T	EPDM	16			
	Firelock Sprinkler Outlet Tee Style 912	25 x 15	33.7 x 21.3	T	EDPM		16	104-1a/34
		32 x 15	42.4 x 21.3	T	EDPM		16	
	Mechanical Tees Style 920N	40 x 15	48.3 x 21.3	T	EDPM		16	104-1a/26
50 x 32		60.3 x 42.4	T	EPDM	20			
50 x 32		60.3 x 42.4	G	EPDM	20			
50 x 40		60.3 x 48.3	T	EPDM	20			
50 x 40		60.3 x 48.3	G	EPDM	20			
	50 x 15	60.3 x 21.3	T	EPDM	20			

PART 3: SECTION 8.1

PIPE COUPLINGS AND FITTINGS

Product Name	Nominal Size (mm)	Pipe Outside Diameter (mm)	Pipe Ends	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.
	50 x 20	60.3 x 26.9	T	EPDM	20	
	x 25	73 x 33.7	T	EPDM	20	
	x 32	73 x 42.4	T	EPDM	20	
	(1) x 32	73 x 42.4	G	EPDM	20	
	x 40	73 x 48.4	T	EPDM	20	
	x 40	73 x 48.3	G	EPDM	20	
	x 15	73 x 21.3	T	EPDM	20	
	x 15	73 x 26.7	T	EPDM	20	
	80 x 15	88.9 x 21.3	T	EPDM	20	
	80 x 20	88.9 x 26.9	T	EPDM	20	
	80 x 25	88.9 x 33.7	T	EPDM	20	
	80 x 32	88.9 x 42.4	T	EPDM	20	
	80 x 32	88.9 x 42.4	G	EPDM	20	
	80 x 40	88.9 x 48.3	T	EPDM	20	
	80 x 40	88.9 x 48.3	G	EPDM	20	
	80 x 50	88.9 x 60.3	T	EPDM	20	
	100 x 20	114.3 x 26.9	T	EPDM	20	
	100 x 25	114.3 x 33.7	T	EPDM	20	
	80 x 50	88.9 x 60.3	G	EPDM	20	
	100 x 15	114.3 x 21.3	T	EPDM	20	
	100 x 32	114.3 x 42.4	T	EPDM	20	
	100 x 32	114.3 x 42.4	G	EPDM	20	
	100 x 40	114.3 x 48.3	T	EPDM	20	
	100 x 40	114.3 x 48.3	G	EPDM	20	
	100 x 50	114.3 x 60.3	T	EPDM	20	
	150 x 50	114.3 x 60.3	G	EPDM	20	
	150 x 32	165.1 x 42.4	T	EPDM	20	
	150 x 32	168.3 x 42.4	T	EPDM	20	
	150 x 40	165.1 x 48.3	T	EPDM	20	
	150 x 50	165.1 x 60.3	T	EPDM	20	
	150 x 32	168.3 x 42.4	G	EPDM	20	
	150 x 40	168.3 x 48.3	T	EPDM	20	
	150 x 40	168.3 x 48.3	G	EPDM	20	
	150 x 50	168.3 x 60.3	T	EPDM	20	
	150 x 50	168.3 x 60.3	G	EPDM	20	
	x 32	108 x 42.2	T	EPDM	20	
	x 40	108 x 48.3	T	EPDM	20	
	x 50	159 x 60.3	T	EPDM	20	
	65 x 32	76.1 x 42.4	T	EPDM	20	
	65 x 32	76.1 x 42.4	G	EPDM	20	
	65 x 40	76.1 x 48.3	T	EPDM	20	
	65 x 40	76.1 x 48.3	G	EPDM	20	
	50 x 25	60.3 x 33.4	T	EPDM	20	
Style 005H	50 ⁽²⁾	60.3	R&C	EPDM	16 ⁽³⁾	104-1a/01
	50 ⁽²⁾	73.0 ⁽¹⁾	R&C	EPDM	16 ⁽³⁾	
	65 ⁽²⁾	76.1	R&C	EPDM	16 ⁽³⁾	
	80 ⁽²⁾	88.9	R&C	EPDM	16 ⁽³⁾	
	80 ⁽²⁾	108.0 ⁽¹⁾	R&C	EPDM	16 ⁽³⁾	
	100 ⁽²⁾	114.3	R&C	EPDM	16 ⁽³⁾	
	100 ⁽²⁾	133.4 ⁽¹⁾	R&C	EPDM	16 ⁽³⁾	
	125 ⁽²⁾	139.7	R&C	EPDM	16 ⁽³⁾	
	125 ⁽²⁾	141.3 ⁽¹⁾	R&C	EPDM	16 ⁽³⁾	
	125 ⁽²⁾	158.8 ⁽¹⁾	R&C	EPDM	16 ⁽³⁾	
	150 ⁽²⁾	165.1	R&C	EPDM	16 ⁽³⁾	
	150 ⁽²⁾	168.3	R&C	EPDM	16 ⁽³⁾	
	200 ⁽²⁾	219.1	R&C	EPDM	16	
Style 07	25	33.7	R&C	EPDM	40 ⁽³⁾	104-1a/02
	32	42.4	R&C	EPDM	40 ⁽³⁾	
	40	48.3	R&C	EPDM	40 ⁽³⁾	
	50	60.3	R&C	EPDM	40 ⁽³⁾	
	50	73.0 ⁽¹⁾	R&C	EPDM	40 ⁽³⁾	
	65	76.1	R&C	EPDM	40 ⁽³⁾	
	80	88.9	R&C	EPDM	40 ⁽³⁾	
	80	108.0 ⁽¹⁾	R&C	EPDM	40 ⁽³⁾	
	100	114.3	R&C	EPDM	40 ⁽³⁾	
	100	133.4 ⁽¹⁾	R&C	EPDM	20 ⁽³⁾	
	125	139.7	R&C	EPDM	20 ⁽³⁾	
	125	141.3 ⁽¹⁾	R&C	EPDM	20 ⁽³⁾	
	125	158.8 ⁽¹⁾	R&C	EPDM	40 ⁽³⁾	
	150	165.1	R&C	EPDM	40 ⁽³⁾	
	150	168.3	R&C	EPDM	40 ⁽³⁾	
	200	219.1	R&C	EPDM	35 ⁽³⁾	

PART 3: SECTION 8.1
PIPE COUPLINGS AND FITTINGS

Product Name	Nominal Size (mm)	Pipe Outside Diameter (mm)	Pipe Ends	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.
Style 741 (Range adaptors)	150	165.1	R&C	EPDM	20	104-1a/10
Style 741 (Flange adaptors)	150	168.3	R&C	EPDM	20	
	200	219.1	R&C	EPDM	20	
	80	88.9	R&C	EPDM	20	
Style 741 (Range adaptors)	125	139.7	R&C	EPDM	20	
Style 741 (Vic-Flange Adaptors)	100	114.3	R&C	EPDM	20	
Style 75	40	48.3	R&C	EPDM	20	104-1a/03
	50	60.3	R&C	EPDM	20	
	65	76.1	R&C	EPDM	20	
	80	88.9	R&C	EPDM	20	
	100	114.3	R&C	EPDM	20	
	125	139.7	R&C	EPDM	20	
	150	165.1	R&C	EPDM	20	
	200	219.1	R&C	EPDM	20	
Style 750 Reducing	50 x 40	60.3 x 48.3	R&C	EPDM	20	104-1a/05
	80 x 50	88.9 x 60.3	R&C	EPDM	20	
	100 x 50	114.3 x 60.3	R&C	EPDM	20	
	100 x 80	114.3 x 88.9	R&C	EPDM	20	
	150 x 100	165.1 x 114.3	R&C	EPDM	20	
	200 x 150	219.1 x 165.1	R&C	EPDM	20	
	65 x 50	76.1 x 60.3	R&C	EPDM	20	078a/08
	80 x 65	88.9 x 76.1	R&C	EPDM	20	
	100 x 65	114.3 x 76.1	R&C	EPDM	16	078a/09
	150 x 80	165.1 x 88.9	R&C	EPDM	15	078a/10
Style 77	20	26.9	R&C	EPDM	20	104-1a/04
	25	33.7	R&C	EPDM	20 ⁽³⁾	
	32	42.4	R&C	EPDM	20 ⁽³⁾	
	40	48.3	R&C	EPDM	20 ⁽³⁾	
	50	60.3	R&C	EPDM	20 ⁽³⁾	
	50	73.0 ⁽¹⁾	R&C	EPDM	20 ⁽³⁾	
	65	76.2	R&C	EPDM	20 ⁽³⁾	
	80	88.9	R&C	EPDM	20 ⁽³⁾	
	100	114.3	R&C	EPDM	20 ⁽³⁾	
	125	139.7	R&C	EPDM	20 ⁽³⁾	
	125	141.3 ⁽¹⁾	R&C	EPDM	20 ⁽³⁾	
	150	165.1	R&C	EPDM	20 ⁽³⁾	
	150	168.3	R&C	EPDM	20 ⁽³⁾	
	200	219.1	R&C	EPDM	20 ⁽³⁾	
Mechanical Tees Style 920	80 x 32	88.9 x 42.4	T	EPDM	20	104-1a/11
	80 x 40	88.9 x 48.3	T	EPDM	20	
	80 x 40	88.9 x 48.3	G	EPDM	20	
	100 x 32	114.3 x 42.4	T	EPDM	20	
	100 x 40	114.3 x 48.3	T	EPDM	20	
	100 x 40	114.3 x 48.3	G	EPDM	20	
	100 x 65	114.3 x 76.1	G	EPDM	20	
	100 x 65	114.3	T (2.5 in BSP)	EPDM	20	
	100 x 65	114.3 x 76.1	G	EPDM	20	
	100 x 80	114.3 x 88.9	T	EPDM	20	
	125 x 65	141.3 x 76.1	G	EPDM	20	
	150 x 40	165.1 x 48.3	G	EPDM	20	
	150 x 50	165.1 x 60.3	G	EPDM	20	
	150 x 50	165.1	T (2.5 in BSP)	EPDM	20	
	150 x 65	165.1 x 73.0	G	EPDM	20	
	150 x 65	168.3 x 76.1	G	EPDM	20	
	150 x 65	165.1 x 76.1	G	EPDM	20	
	150 x 80	165.1 x 88.9	T	EPDM	20	
	150 x 80	165.1 x 88.9	G	EPDM	20	
	150 x 80	168.3 x 88.9	G	EPDM	20	
	150 x 100	165.1 x 114.3	T	EPDM	20	
	150 x 100	165.1 x 114.3	G	EPDM	20	
	150 x 100	168.3 x 114.3	G	EPDM	20	
	200 x 50	219.1 x 60.3	G	EPDM	20	
	200 x 65	219.1 x 76.1	T	EPDM	20	
	200 x 65	219.1 x 76.1	G	EPDM	20	
	200 x 80	219.1 x 88.9	T	EPDM	20	

PART 3: SECTION 8.1

PIPE COUPLINGS AND FITTINGS

Product Name	Nominal Size (mm)	Pipe Outside Diameter (mm)	Pipe Ends	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.		
Style 927	200 x 80	219.1 x 88.9	G	EPDM	20	104-1a/09		
	200 x 100	219.1 x 114.3	G	EPDM	20			
	200 x 100	219.1 x 114.3	T	EPDM	20			
	32 x 15	42.4 x 21.3	T	EPDM	12			
	32 x 20	42.4 x 26.7	T	EPDM	12			
	32 x 25	42.4 x 26.9	T	EPDM	12			
	40 x 15	48.3 x 21.3	T	EPDM	12			
	40 x 20	48.3 x 26.9	T	EPDM	12			
	40 x 25	48.3 x 33.7	T	EPDM	12			
	50 x 15	60.3 x 21.3	T	EPDM	12			
Victaulic Mechanical Tees	50 x 20	60.3 x 26.9	T	EPDM	12	104-1a/06		
	50 x 25	60.3 x 33.7	T	EPDM	12			
	100 x 50	114.3 x 60.3	G	EPDM	20			
	100 x 80	114.3 x 88.9	G	EPDM	20		104-1a/07	
	150 x 50	165.1 x 60.3	G	EPDM	15			
	150 x 80	165.1 x 88.9	G	EPDM	15			
	Style 009N	150 x 100	165.1 x 114.3	G	EPDM		15	104-1a/08
		200 x 80	219.1 x 88.9	G	EPDM		20	
		200 x 100	219.1 x 114.3	G	EPDM		20	104-1a/36
		32 ⁽⁴⁾	42.2	R&C	EPDM		25 ⁽³⁾	
40 ⁽⁴⁾		48.3	R&C	EPDM	25 ⁽³⁾			
50 ⁽⁴⁾		60.3	R&C	EPDM	25 ⁽³⁾			
65 ⁽⁴⁾		73.0	R&C	EPDM	25 ⁽³⁾			
65 ⁽⁴⁾		76.1	R&C	EPDM	25 ⁽³⁾			
80 ⁽⁴⁾		88.9	R&C	EPDM	25 ⁽³⁾			
100 ⁽⁴⁾		114.3	R&C	EPDM	25 ⁽³⁾			
125 ⁽⁴⁾	139.7	R&C	EPDM	25 ⁽³⁾				
125 ⁽⁴⁾	141.3	R&C	EPDM	25 ⁽³⁾				
Style 009H	150 ⁽⁴⁾	165.1	R&C	EPDM	25 ⁽³⁾	104-1a/35		
	150 ⁽⁴⁾	168.3	R&C	EPDM	25 ⁽³⁾			
	200 ⁽⁴⁾	219.1	R&C	EPDM	25 ⁽³⁾			
	250 ⁽⁴⁾	273.0	R&C	EPDM	20			
	300 ⁽⁴⁾	323.9	R&C	EPDM	20			
	125	139.7	R&C	EPDM	25			
	125	141.3	R&C	EPDM	25			
	150	165.1	R&C	EPDM	25			
	150	168.3	R&C	EPDM	25			
	200	219.1	R&C	EPDM	25			
Style 107V (5)	250	273.0	R&C	EPDM	20	104-1a/40		
	300	323.9	R&C	EPDM	20			
Style 115	32 x 25	42.4 x 33.7	G	EPDM	25	104-1a/39		
	40 x 25	48.3 x 33.7	G	EPDM	25			

Notes:

All products to be installed in accordance with the relevant Victaulic Instructions, additional references below

- (1) These sizes are not suitable for installations that requires BS 1387 pipework due to the sizes not being included in that standard.
- (2) These products to be installed in accordance with Victaulic Installation Handbook I-100 3698 Rev_F Updated 09/2021.
- (3) These products are approved to the above stated maximum working pressures with zinc-electroplated bolts and nuts and also approved to 25 bar working pressure with hot dipped galvanized bolts and nuts.
- (4) These products to be installed in accordance with Victaulic Installation Instructions I-009N 4079 Rev_N Updated 10/2022.
- (5) I-107V REV_B Style 107V QuickVic Installation-Ready rigid coupling

Certificate No: 104-1a to LPS 1219: Issue 3.1

Certificate No: 078a

PART 3: SECTION 8.1
PIPE COUPLINGS AND FITTINGS

Fittings

Product Name	Model No.	Pipe Outside Diameter (mm)	Maximum Working Pressure (bar)	LPCB Ref. No.
90° Elbow	10	20, 25, 32, 40, 50, 65, 80, 100, 150, 200	20	104-1a/12
90° Long Radius Elbow	100	125 50, 80, 100, 150, 200	20	078a/15
45° Elbow	11	20, 25, 32, 40, 50, 80, 100, 150, 200	20	104-1a/13
45° Long Radius Elbow	110	65, 125 50, 80, 100, 150, 200	20	104-1a/14
22.5° Elbow	12	25, 32, 40, 50, 65, 80, 100, 150, 200	20	078a/16
11.25° Elbow	13	25, 32, 40, 50, 80, 100, 150, 200	20	104-1a/15
Tee	20	20, 25, 32, 40, 50, 80, 100, 150, 200	20	104-1a/16
Cross	35	125 20, 25, 32, 40, 50, 80, 100, 200	20	104-1a/17
Cap	60	25, 32, 40, 50, 80, 100, 150, 200	20	104-1a/18
45° Lateral	30	250, 300 20, 25, 32, 40, 50, 80, 100, 150, 200	20.7	078a/17
90° True Y	33	25, 32, 40, 50, 80, 100, 200	20	104-1a/19
Concentric Reducer	50	40 x 25, 50 x 20, 50 x 25, 50 x 32, 50 x 40, 80 x 25, 80 x 50, 100 x 125, 100 x 40, 100 x 50, 100 x 80, 200 x 80, 200 x 100	20	104-1a/20
Eccentric Reducer	51	40 x 25, 50 x 20, 50 x 25, 50 x 32, 50 x 40, 80 x 25, 80 x 50, 100 x 125, 100 x 40, 100 x 50, 100 x 80, 200 x 80, 200 x 100	20	104-1a/21
45° Reducing Lateral	30R	x 25, 80 x 80 x 40, 80 x 80 x 50, 100 x 100 x 25, 100 x 100 x 50, 100 x 100 x 80, 150 x 150 x 50, 150 x 150 x 100, 200 x 200 x 50, 200 x 200 x 80, 200 x 200 x 100, 200 x 200 x 150	20	104-1a/22
Reducing Tee Grooved	25	80 x 80 x 50, 100 x 100 x 50, 100 x 100 x 80, 200 x 200 x 100	20	104-1a/23
Reducing Tee Threaded	29R	50 x 50 x 20, 50 x 50 x 25, 50 x 50 x 40, 80 x 80 x 25, 80 x 80 x 40, 80 x 80 x 50, 100 x 100 x 25, 100 x 100 x 50, 100 x 100 x 80, 150 x 150 x 50, 150 x 150 x 100, 200 x 200 x 50, 200 x 200 x 80, 200 x 200 x 100, 200 x 200 x 150	20	104-1a/24
Blank End Grooved (Radial Branch)		65, 125	20	104-1a/25
Pitcher Tee		100 x 100 x 2.5 in BSP	20	078a/18
Firelock 90° Elbow	001	60.3, 73, 76.1, 88.9, 114.3, 139.7, 141.3, 165.1, 168.3, 219.1	16	078a/19
Firelock Tee	002	60.3, 73, 76.1, 88.9, 114.3, 139.7, 141.3, 165.1, 168.3, 219.1	16	104-1a/28
Firelock 45° Elbow	003	60.3, 73, 76.1, 88.9, 114.3, 139.7, 141.3, 165.1, 168.3, 219.1	16	104-1a/29
OGS Groove Adaptor	Style 144	42.4 x 33.7, 48.3 x 33.7	25	104-1a/30
Reducing Elbow (1)	Style 65	42.2 x 33.7, 48.3 x 33.7, 60.3 x 33.7, 73 x 33.7	25	104-1a/31

Notes:

All coupling and fittings to be installed in accordance with Victaulic Field Assembly and Installation Handbook.

(1) Only to be use as end of line fitting with flexible connector.

Certificate No: 104-1a/38 to LPS 1219: Issue 3.1

PART 3: SECTION 8.1

PIPE COUPLINGS AND FITTINGS

Installation Ready Fittings

Product Name	Model No.	Pipe Outside Diameter (mm)	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.
90° Elbow	101	42.4 ⁽¹⁾ , 48.3 ⁽¹⁾ , 60.3 ⁽²⁾ , 73.0 ⁽²⁾ , 76.1 ⁽²⁾	EPDM	25	104-1a/38
Tee	102	42.4 ⁽¹⁾ , 48.3 ⁽¹⁾ , 60.3 ⁽²⁾ , 73.0 ⁽²⁾ , 76.1 ⁽²⁾	EPDM	25	
45° Elbow	103	42.4 ⁽¹⁾ , 48.3 ⁽¹⁾ , 60.3 ⁽²⁾ , 73.0 ⁽²⁾ , 76.1 ⁽²⁾	EPDM	25	

Certificate No: 104-1b to LPS 1219: Issue 3.1

IGS Fittings

Product Name	Model No.	Pipe Outside Diameter (mm)	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.
Installation-Ready 90° Elbow	101	33.3 ⁽¹⁾	EPDM	25	104-1b/01
Installation-Ready Tee	102	33.3 ⁽¹⁾	EPDM	25	104-1b/02
Male Threaded x Grooved Adaptor	140	33.3	-	25	104-1b/03
Female Threaded x Grooved Adaptor	141	33.3	-	25	104-1b/04
Welded Outlet	142	33.3	-	25	104-1b/05
Close Nipple	143	33.3	-	25	104-1b/06
Female Threaded x Grooved 90° Elbow	145	33.3	-	25	104-1b/07
Cap	146	33.3	-	25	104-1b/08
Sprinkler Reducer Outlet	148	33.3	-	25	104-1b/09
Installation-Ready Rigid Coupling	108	33.3	EPDM	25	104-1b/10
Grooved Flexible Drop Outlet-T	922	33.3 ⁽¹⁾	EPDM	25	104-1b/11
Installation-Ready 45° Elbow	103	33.3	-	25	104-1b/12
Grooved End 90° Elbow	111	33.3	-	25	104-1b/13
Grooved Tee	114	33.3	-	25	104-1b/14
45° Elbow	117	33.3	-	25	104-1b/15

This section lists products approved in accordance with:

- LPS 1261 *Flexible sprinkler connectors.*

This Standard describes tests for the assessment of the suitability of metallic flexible sprinkler connectors to be used to connect single sprinklers to range pipes in automatic sprinkler systems.

Approved products are for use with pendant sprinklers with a maximum K-factor of 80 and a maximum operating temperature of 141 °C.

These products should be used in conjunction with an appropriate Automatic Sprinkler System installation code, such as the LPC Sprinkler Rules for Automatic Sprinkler Installations. Some installation codes may require these products to be supported, braided, used in conjunction with radius indicating equipment or may prohibit the use of these products by a maximum length or from use at all irrespective of length.

A wide range of flexible drop pipe lengths are available in these listings. The end users should ensure the selection of appropriate product with due regard to the installation codes and rules applicable to the territories in which these products are being installed.

Dong-A Flexible Metal Tubes Co. Ltd.

28 Baumoe-ro, 35-Gil, Seocho-Gu, Seoul 06744, Republic of Korea
Tel: +82 (0)2 3476 2541 • Fax: +82 (0)2 3476 2540
E-mail: daflex@daflex.co.kr

Sales Enquiries:

Tel: +44 (0)1733 847 510 • Fax: +44 (0)1733 553 958
E-mail: rapidrop@rapidrop.com

Certificate No: 566Aa to LPS 1261: Issue 1.2

Dong-A Flexible Sprinkler Connectors

Product Name	Length (mm)	Nominal Size/Connection Supply	Nominal Size/Connection Outlet Size/Connection	Maximum Working Pressure (bar)	LPCB Ref. No.
DA-SP-1_S	700	R1 (1"BSPT), 1"NPT, R1½ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	566a/01
DA-SP-1	780	R1 (1"BSPT), 1"NPT, R1½ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
DA-SP-2_S	1,000	R1 (1"BSPT), 1"NPT, R1½ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
DA-SP-2	1,220	R1 (1"BSPT), 1"NPT, R1½ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
DA-SP-3	1,540	R1 (1"BSPT), 1"NPT, R1½ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
DA-SP-4	1,880	R1 (1"BSPT), 1"NPT, R1½ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
DA-SP-5	2,540	R1 (1"BSPT), 1"NPT, R1½ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
DA-SP-6	3,220	R1 (1"BSPT), 1"NPT, R1½ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
DA-SPN-1_S	700	R1 (1"BSPT), 1"NPT, R1½ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	566a/02

PART 3: SECTION 8.2

FLEXIBLE DROPS

Product Name	Length (mm)	Nominal Size/Connection Supply	Nominal Size/Connection Outlet Size/Connection	Maximum Working Pressure (bar)	LPCB Ref. No.
DA-SPN-1	780	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	RRc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
DA-SPN-2_S	1,000	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
DA-SPN-2	1,220	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
DA-SPN-3	1,540	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
DA-SPN-4	1,880	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
DA-SPN-5	2,540	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
DA-SPN-6	3,220	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
DA-SPW-1_S	700	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	566a/03
	780	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
DA-SPW-2_S	1,000	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
DA-SPW-2	1,220	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
DA-SPW-3	1,540	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
DA-SPW-4	1,880	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
DA-SPW-5	2,540	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
DA-SPW-6	3,220	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	

Meide Ayvaz (Jinan) Metal Products Co. Ltd

No.31 Aohai Road, Kongcun Town, Pingyin County, Jinan City, Shandong Province 250400, China

Tel: +86 531 87885062 • Fax: +86 531 87879387

E-mail: info@meide-casting.com • Website: www.meide-casting.com

Certificate No: 1735a to LPS 1261: Issue 03 draft

'MECH' (Braided) Flexible Sprinkler Connectors

Product Name	Length (mm)	Nominal Size/Connection Supply	Nominal Size/Connection Outlet	Maximum Working Pressure (bar)	LPCB Ref. No.
FBC2-700	700	1" BSPT / NPT 1¼" BSPT / NPT External thread	½" BSPT / NPT ¾" BSPT / NPT Internal thread	16	1735a/01
FBC2-790	790	1" BSPT / NPT 1¼" BSPT / NPT External thread	½" BSPT / NPT ¾" BSPT / NPT Internal thread	16	

PART 3: SECTION 8.2

FLEXIBLE DROPS

Product Name	Length (mm)	Nominal Size/Connection Supply	Nominal Size/Connection Outlet	Maximum Working Pressure (bar)	LPCB Ref. No.
FBC2-915	915	1" BSPT / NPT 1¼" BSPT / NPT External thread	½" BSPT / NPT ¾" BSPT / NPT Internal thread	16	
FBC2-1000	1000	1" BSPT / NPT 1¼" BSPT / NPT External thread	½" BSPT / NPT ¾" BSPT / NPT Internal thread	16	
FBC2-1200	1200	1" BSPT / NPT 1¼" BSPT / NPT External thread	½" BSPT / NPT ¾" BSPT / NPT Internal thread	16	
FBC2-1500	1500	1" BSPT / NPT 1¼" BSPT / NPT External thread	½" BSPT / NPT ¾" BSPT / NPT Internal thread	16	
FBC2-1800	1800	1" BSPT / NPT 1¼" BSPT / NPT External thread	½" BSPT / NPT ¾" BSPT / NPT Internal thread	16	

Rapidrop Global Limited

Rutland Business Park, Newark Road, Peterborough PE1 5WA, United Kingdom

Tel: +44 (0)1733 847 510 • Fax: +44 (0)1733 553 958

E-mail: rapidrop@rapidrop.com • Website: www.rapidrop.com

Certificate No: 566a to LPS 1261: Issue 1.2

Rapidrop SP, SPN & SPW Flexible Sprinkler Connectors

Product Name	Length (mm)	Nominal Size/Connection Supply	Nominal Size/Connection Outlet	Maximum Working Pressure (bar)	LPCB Ref. No.
SP-1_S	700	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	566a/01
SP-1	780	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
SP-2_S	1,000	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
SP-2	1,220	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
SP-3	1,540	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
SP-4	1,880	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
SP-5	2,540	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
SP-6	3,220	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
SPN-1_S	700	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	566a/02
SPN-1	780	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
SPN-2_S	1,000	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
SPN-2	1,220	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	

PART 3: SECTION 8.2

FLEXIBLE DROPS

Product Name	Length (mm)	Nominal Size/Connection Supply	Nominal Size/Connection Outlet	Maximum Working Pressure (bar)	LPCB Ref. No.
SPN-3	1,540	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
SPN-4	1,880	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
SPN-5	2,540	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
SPN-6	3,220	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
SPW-1_S	700	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	566a/03
SPW-1	780	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
SPW-2_S	1,000	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
SPW-2	1,220	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
SPW-3	1,540	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
SPW-4	1,880	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
SPW-5	2,540	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
SPW-6	3,220	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	

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Rapidrop RD-SMB (Braided) & RD-SM (Unbraided) Flexible Sprinkler Connectors

Product Name	Length (mm)	Nominal Size/Connection Supply	Nominal Size/Connection Outlet	Maximum Working Pressure (bar)	LPCB Ref. No.
RD-SMB-01	780	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	566i/01
RD-SMB-02	1000	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
RD-SMB-03	1220	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
RD-SMB-04	1540	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
RD-SMB-05	1830	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
RD-SM-01	780	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	566i/02
RD-SM-02	1000	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
RD-SM-03	1220	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	

PART 3: SECTION 8.2

FLEXIBLE DROPS

Product Name	Length (mm)	Nominal Size/Connection Supply	Nominal Size/Connection Outlet	Maximum Working Pressure (bar)	LPCB Ref. No.
RD-SM-04	1540	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
RD-SM-05	1830	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	
RD-SM-06	2500	R1 (1"BSPT), 1"NPT, R1¼ (1¼"BSPT), 1¼"NPT External thread	Rc½"BSPT, ½"NPT, Rc¾"BSPT, ¾"NPT Internal thread	16	

Reliable Fire Sprinkler (UK) Limited

Origin One, 108 High Street, Crawley, West Sussex RH10 1BD, United Kingdom

Tel: +44 (0)1342 316800 • Fax: +44 (0)1342 314679

E-mail: arobotham@reliablesprinkler.com • Website: www.reliablesprinkler.com

Certificate No: 140d to LPS 1261

RASCOFLEX 28mm Braided & Unbraided Flexible Sprinkler Hose

Product Name	Length (mm)	Nominal Size / Connection Supply	Nominal Size / Connection Outlet	Maximum Working Pressure (bar)	LPCB Ref. No.
RF070U	700	1" BSPT/NPT external thread	½" BSPT/NPT internal thread	14	140d/01
		1¼" BSPT/NPT external thread	¾" BSPT/NPT internal thread		
RF100U	1000	1" BSPT/NPT external thread	½" BSPT/NPT internal thread	14	
		1¼" BSPT/NPT external thread	¾" BSPT/NPT internal thread		
RF120U	1200	1" BSPT/NPT external thread	½" BSPT/NPT internal thread	14	
		1¼" BSPT/NPT external thread	¾" BSPT/NPT internal thread		
RF150U	1500	1" BSPT/NPT external thread	½" BSPT/NPT internal thread	14	
		1¼" BSPT/NPT external thread	¾" BSPT/NPT internal thread		
RF180U	1800	1" BSPT/NPT external thread	½" BSPT/NPT internal thread	14	
		1¼" BSPT/NPT external thread	¾" BSPT/NPT internal thread		
RF070B	700	1" BSPT/NPT external thread	½" BSPT/NPT internal thread	14	140d/02
		1¼" BSPT/NPT external thread	¾" BSPT/NPT internal thread		
RF100B	1000	1" BSPT/NPT external thread	½" BSPT/NPT internal thread	14	
		1¼" BSPT/NPT external thread	¾" BSPT/NPT internal thread		
RF120B	1200	1" BSPT/NPT external thread	½" BSPT/NPT internal thread	14	
		1¼" BSPT/NPT external thread	¾" BSPT/NPT internal thread		
RF150B	1500	1" BSPT/NPT external thread	½" BSPT/NPT internal thread	14	
		1¼" BSPT/NPT external thread	¾" BSPT/NPT internal thread		

PART 3: SECTION 8.2

FLEXIBLE DROPS

Product Name	Length (mm)	Nominal Size / Connection Supply	Nominal Size / Connection Outlet	Maximum Working Pressure (bar)	LPCB Ref. No.
RF180B	1800	1" BSPT/NPT external thread 1¼" BSPT/NPT external thread	½" BSPT/NPT internal thread ¾" BSPT/NPT internal thread	14	

Seung Jin Ind. Co., Ltd.

9 Beonan-Gil, 181 Cheomdan-Ro, Danwon-Gu, Ansan-Si, Gyeonggi-Do, Republic of Korea

Tel: +82 31 499 0991 • Fax: +82 31 499 0993

E-mail: oversales@onlyflexone.com • Website: www.seungjin.kr

Certificate No: 1468a to LPS 1261: Issue 03 draft

FLEXONE SJ27B (Braided) & SJ27N (Unbraided) Flexible Sprinkler Connectors

Product Name	Length (mm)	Nominal Size/Connection Supply	Nominal Size/Connection Outlet	Maximum Working Pressure (bar)	LPCB Ref. No.
FLEXONE SJ27B-T700	700	1" BSPT / NPT External thread 1¼" BSPT / NPT External thread	½" BSPT / NPT Internal thread ¾" BSPT / NPT Internal thread	14	1468a/01
FLEXONE SJ27B-T1000	1000	1" BSPT / NPT External thread 1¼" BSPT / NPT External thread	½" BSPT / NPT Internal thread ¾" BSPT / NPT Internal thread	14	
FLEXONE SJ27B-T1200	1200	1" BSPT / NPT External thread 1¼" BSPT / NPT External thread	½" BSPT / NPT Internal thread ¾" BSPT / NPT Internal thread	14	
FLEXONE SJ27B-T1500	1500	1" BSPT / NPT External thread 1¼" BSPT / NPT External thread	½" BSPT / NPT Internal thread ¾" BSPT / NPT Internal thread	14	
FLEXONE SJ27B-T1800	1800	1" BSPT / NPT External thread 1¼" BSPT / NPT External thread	½" BSPT / NPT Internal thread ¾" BSPT / NPT Internal thread	14	
FLEXONE SJ27N-T700	700	1" BSPT / NPT External thread 1¼" BSPT / NPT External thread	½" BSPT / NPT Internal thread ¾" BSPT / NPT Internal thread	14	1468a/02
FLEXONE SJ27N-T1000	1000	1" BSPT / NPT External thread 1¼" BSPT / NPT External thread	½" BSPT / NPT Internal thread ¾" BSPT / NPT Internal thread	14	
FLEXONE SJ27N-T1200	1200	1" BSPT / NPT External thread 1¼" BSPT / NPT External thread	½" BSPT / NPT Internal thread ¾" BSPT / NPT Internal thread	14	
FLEXONE SJ27N-T1500	1500	1" BSPT / NPT External thread 1¼" BSPT / NPT External thread	½" BSPT / NPT Internal thread ¾" BSPT / NPT Internal thread	14	
FLEXONE SJ27N-T1800	1800	1" BSPT / NPT External thread 1¼" BSPT / NPT External thread	½" BSPT / NPT Internal thread ¾" BSPT / NPT Internal thread	14	

Shield Fire, Safety & Security Ltd

Genesis, Unit 3, Endeavour Drive, Basildon SS14 3WF, United Kingdom

Tel: 01708 377 731 • Fax: 01708 347 637

E-mail: shieldduk@shieldglobal.com • Website: www.shieldglobal.com

Certificate No: 1468Aa to LPS 1261: Issue 03 draft

SHIELD SDF-B (Braided) & SDF-N (Unbraided) Flexible Sprinkler Connectors

Product Name	Length (mm)	Nominal Size/Connection Supply	Nominal Size/Connection Outlet	Maximum Working Pressure (bar)	LPCB Ref. No.
SHIELD SDF-B700	700	1" BSPT / NPT	½" BSPT / NPT	14	1468Aa/01
		1¼" BSPT / NPT	¾" BSPT / NPT		
		External thread	Internal thread		
SHIELD SDF-B1000	1000	1" BSPT / NPT	½" BSPT / NPT	14	
		1¼" BSPT / NPT	¾" BSPT / NPT		
		External thread	Internal thread		
SHIELD SDF-B1200	1200	1" BSPT / NPT	½" BSPT / NPT	14	
		1¼" BSPT / NPT	¾" BSPT / NPT		
		External thread	Internal thread		
SHIELD SDF-B1500	1500	1" BSPT / NPT	½" BSPT / NPT	14	
		1¼" BSPT / NPT	¾" BSPT / NPT		
		External thread	Internal thread		
SHIELD SDF-B1800	1800	1" BSPT / NPT	½" BSPT / NPT	14	
		1¼" BSPT / NPT	¾" BSPT / NPT		
		External thread	Internal thread		
SHIELD SDF-N700	700	1" BSPT / NPT	½" BSPT / NPT	14	1468Aa/02
		1¼" BSPT / NPT	¾" BSPT / NPT		
		External thread	Internal thread		
SHIELD SDF-N1000	1000	1" BSPT / NPT	½" BSPT / NPT	14	
		1¼" BSPT / NPT	¾" BSPT / NPT		
		External thread	Internal thread		
SHIELD SDF-N1200	1200	1" BSPT / NPT	½" BSPT / NPT	14	
		1¼" BSPT / NPT	¾" BSPT / NPT		
		External thread	Internal thread		
SHIELD SDF-N1500	1500	1" BSPT / NPT	½" BSPT / NPT	14	
		1¼" BSPT / NPT	¾" BSPT / NPT		
		External thread	Internal thread		
SHIELD SDF-N1800	1800	1" BSPT / NPT	½" BSPT / NPT	14	
		1¼" BSPT / NPT	¾" BSPT / NPT		
		External thread	Internal thread		

The Viking Corporation

210 N Industrial Park, Hastings, Michigan 49058, USA
 Tel: +1 269 945 9501 • Fax: +1 269 945 9599
 E-mail: techsvcs@vikingcorp.com • Website: www.vikingcorp.com

Certificate No: 096k to LPS 1261: Issue 03 draft

VK27B (Braided)-and VK27N (Unbraided) Flexible Sprinkler Connectors

Product Name	Length (mm)	Nominal Size/Connection Supply	Nominal Size/Connection Outlet	Maximum Working Pressure (bar)	LPCB Ref. No.
FIREKING VK27N-T700	700	1 BSPT / NPT	½" BSPT / NPT	14	096k/01
		External thread	¾" BSPT / NPT		
			Internal thread		
FIREKING VK27N-T1000	1000	1 BSPT / NPT	½" BSPT / NPT	14	
		External thread	¾" BSPT / NPT		
			Internal thread		
FIREKING VK27N-T1200	1200	1 BSPT / NPT	½" BSPT / NPT	14	
		External thread	¾" BSPT / NPT		
			Internal thread		
FIREKING VK27N-T1500	1500	1 BSPT / NPT	½" BSPT / NPT	14	
		External thread	¾" BSPT / NPT		
			Internal thread		
FIREKING VK27N-T1800	1800	1 BSPT / NPT	½" BSPT / NPT	14	
		External thread	¾" BSPT / NPT		
			Internal thread		
FIREKING VK27B-T700	700	1 BSPT / NPT	½" BSPT / NPT	14	096k/02
		External thread	¾" BSPT / NPT		
			Internal thread		
FIREKING VK27B-T1000	1000	1 BSPT / NPT	½" BSPT / NPT	14	
		External thread	¾" BSPT / NPT		
			Internal thread		

PART 3: SECTION 8.2

FLEXIBLE DROPS

Product Name	Length (mm)	Nominal Size/Connection Supply	Nominal Size/Connection Outlet	Maximum Working Pressure (bar)	LPCB Ref. No.
FIREKING VK27B-T1200	1200	1 BSPT / NPT External thread	½" BSPT / NPT ¾" BSPT / NPT Internal thread	14	
FIREKING VK27B-T1500	1500	1 BSPT / NPT External thread	½" BSPT / NPT ¾" BSPT / NPT Internal thread	14	
FIREKING VK27B-T1800	1800	1 BSPT / NPT External thread	½" BSPT / NPT ¾" BSPT / NPT Internal thread	14	

Tyco Building Services Products B.V. part of the Johnson Controls group of Companies

Kopersteden 1, 7547 TJ Enschede, The Netherlands

Tel: +31 53 4284444 • Fax: +31 53 4283377

E-mail: info-NL@tyco-bspd.com • Website: www.tycobuilding.com

Certificate No: 169a to LPS 1261: Issue 03 draft

FASTFLEX YN (Unbraided) Flexible Sprinkler Connectors

Product Name	Length (mm)	Nominal Size/Connection Supply	Nominal Size/Connection Outlet	Maximum Working Pressure (bar)	LPCB Ref. No.
YN25-700	700	R1 (1"BSPT or 1"NPT) or R1.1/4 (1.1/4"BSPT) External thread	Rc1/2 or Rc3/4 (BSPT or NPT) Internal thread	16	169a/01
YN25-1000	1000	R1 (1"BSPT or 1"NPT) or R1.1/4 (1.1/4"BSPT) External thread	Rc1/2 or Rc3/4 (BSPT or NPT) Internal thread	16	
YN25-1200	1200	R1 (1"BSPT or 1"NPT) or R1.1/4 (1.1/4"BSPT) External thread	Rc1/2 or Rc3/4 (BSPT or NPT) Internal thread	16	
YN25-1500	1500	R1 (1"BSPT or 1"NPT) or R1.1/4 (1.1/4"BSPT) External thread	Rc1/2 or Rc3/4 (BSPT or NPT) Internal thread	16	
YN25-1800	1800	R1 (1"BSPT or 1"NPT) or R1.1/4 (1.1/4"BSPT) External thread	Rc1/2 or Rc3/4 (BSPT or NPT) Internal thread	16	

Victaulic Company

4901 Kesslersville Road, Easton, Pennsylvania 18040, USA

Tel: +1 610 559 3300 • Fax: +1 610 250 8817

E-mail: victaulic@victaulic.com • Website: www.victaulic.com

Certificate No: 1041 to LPS 1261

Victaulic VicFlex™ AH2 braided flexible sprinkler drops

Product Name	Length (mm)	Nominal Size/Connection Supply	Nominal Size/Connection Outlet	Maximum Working Pressure (bar)	LPCB Ref. No.
AH2-31	790	1"BSPT (or NPT) External thread	½" or ¾" BSPT (or NPT) Internal thread	16	1041/01
AH2-36	915	1"BSPT (or NPT) External thread	½" or ¾" BSPT (or NPT) Internal thread	16	
AH2-48	1220	1"BSPT (or NPT) External thread	½" or ¾" BSPT (or NPT) Internal thread	16	

PART 3: SECTION 8.2

FLEXIBLE DROPS

Product Name	Length (mm)	Nominal Size/Connection Supply	Nominal Size/Connection Outlet	Maximum Working Pressure (bar)	LPCB Ref. No.
AH2-60	1525	1"BSPT (or NPT) External thread	½" or ¾" BSPT (or NPT) Internal thread	16	
AH2-72	1830	1"BSPT (or NPT) External thread	½" or ¾" BSPT (or NPT) Internal thread	16	
AH2-31	790	1¼" x 1" BSPT (or NPT) External thread	½" or ¾" BSPT (or NPT) Internal thread	16	
AH2-36	915	1¼" x 1" BSPT (or NPT) External thread	½" or ¾" BSPT (or NPT) Internal thread	16	
AH2-48	1220	1¼" x 1" BSPT (or NPT) External thread	½" or ¾" BSPT (or NPT) Internal thread	16	
AH2-60	1525	1¼" x 1" BSPT (or NPT) External thread	½" or ¾" BSPT (or NPT) Internal thread	16	
AH2-72	1830	1¼" x 1" BSPT (or NPT) External thread	½" or ¾" BSPT (or NPT) Internal thread	16	

Certificate No: 1041 to LPS 1261

Victaulic VicFlex™ AH2-CC grooved end braided flexible sprinkler drops.

Product Name	Length (mm)	Nominal Size/Connection Supply	Nominal Size/Connection Outlet	Maximum Working Pressure (bar)	LPCB Ref. No.
AH2-31	790	1" BSPT (or NPT) External thread	½" or ¾" BSPT (or NPT) Internal thread	16	1041/04
AH2-36	910	1" BSPT (or NPT) External thread	½" or ¾" BSPT (or NPT) Internal thread	16	
AH2-48	1220	1" BSPT (or NPT) External thread	½" or ¾" BSPT (or NPT) Internal thread	16	
AH2-60	1525	1" BSPT (or NPT) External thread	½" or ¾" BSPT (or NPT) Internal thread	16	
AH2-72	1830	1" BSPT (or NPT) External thread	½" or ¾" BSPT (or NPT) Internal thread	16	

Certificate No: 1041 to LPS 1261

Victaulic VicFlex™ AH1 braided flexible sprinkler drops

Product Name	Length (mm)	Nominal Size/Connection Supply	Nominal Size/Connection Outlet	Maximum Working Pressure (bar)	LPCB Ref. No.
AH1-31	790	1"BSPT (or NPT) External thread	½" or ¾" BSPT (or NPT) Internal thread	16	1041/02
AH1-36	910	1"BSPT (or NPT) External thread	½" or ¾" BSPT (or NPT) Internal thread	16	
AH1-48	1220	1"BSPT (or NPT) External thread	½" or ¾" BSPT (or NPT) Internal thread	16	
AH1-60	1525	1"BSPT (or NPT) External thread	½" or ¾" BSPT (or NPT) Internal thread	16	
AH1-72	1830	1"BSPT (or NPT) External thread	½" or ¾" BSPT (or NPT) Internal thread	16	
AH1-31	790	1¼" x 1"BSPT (or NPT) External thread	½" or ¾" BSPT (or NPT) Internal thread	16	
AH1-36	910	1¼" x 1"BSPT (or NPT) External thread	½" or ¾" BSPT (or NPT) Internal thread	16	
AH1-48	1220	1¼" x 1"BSPT (or NPT) External thread	½" or ¾" BSPT (or NPT) Internal thread	16	
AH1-60	1525	1¼" x 1"BSPT (or NPT) External thread	½" or ¾" BSPT (or NPT) Internal thread	16	

PART 3: SECTION 8.2

FLEXIBLE DROPS

Product Name	Length (mm)	Nominal Size/Connection Supply	Nominal Size/Connection Outlet	Maximum Working Pressure (bar)	LPCB Ref. No.
AH1-72	1830	1 1/4" x 1" BSPT (or NPT) External thread	1/2" or 3/4" BSPT (or NPT) Internal thread	16	

Certificate No: 1041 to LPS 1261

Victaulic VicFlex™ AH1-CC grooved end braided flexible sprinkler drops.

Product Name	Length (mm)	Nominal Size/Connection Supply	Nominal Size/Connection Outlet	Maximum Working Pressure (bar)	LPCB Ref. No.
AH1-31	790	0.8" BSPT (or NPT) External thread	1/2" or 3/4" BSPT (or NPT) Internal thread	16	1041/03
AH1-36	910	0.8" BSPT (or NPT) External thread	1/2" or 3/4" BSPT (or NPT) Internal thread	16	
AH1-48	1220	0.8" BSPT (or NPT) External thread	1/2" or 3/4" BSPT (or NPT) Internal thread	16	
AH1-60	1525	0.8" BSPT (or NPT) External thread	1/2" or 3/4" BSPT (or NPT) Internal thread	16	
AH1-72	1830	0.8" BSPT (or NPT) External thread	1/2" or 3/4" BSPT (or NPT) Internal thread	16	

Youngjin Flex Co., Ltd.

93, Dangjaebong-ro, Jori-eup, Paju-si, Gyeonggi-do 10949, Republic of Korea

Tel: +82-31-432-9772 • Fax: +82-31-945-3765

E-mail: yj1991@yjflex.com • Website: www.yjflex.com

Certificate No: 1254a to LPS 1261: Issue 03 draft

Youngjin YJ28-S (Unbraided) & YJ28-SB (Braided) Flexible Sprinkler Connectors

Product Name	Length (mm)	Nominal Size / Connection Supply	Nominal Size / Connection Outlet	Maximum Working Pressure (bar)	LPCB Ref. No.
YJ28-S-700	700	1" BSPT/NPT external thread	1/2" BSPT/NPT internal thread	14	1254a/01
		1 1/4" BSPT/NPT external thread	3/4" BSPT/NPT internal thread		
YJ28-S-1000	1000	1" BSPT/NPT external thread	1/2" BSPT/NPT internal thread	14	
		1 1/4" BSPT/NPT external thread	3/4" BSPT/NPT internal thread		
YJ28-S-1200	1200	1" BSPT/NPT external thread	1/2" BSPT/NPT internal thread	14	
		1 1/4" BSPT/NPT external thread	3/4" BSPT/NPT internal thread		
YJ28-S-1500	1500	1" BSPT/NPT external thread	1/2" BSPT/NPT internal thread	14	
		1 1/4" BSPT/NPT external thread	3/4" BSPT/NPT internal thread		
YJ28-S-1800	1800	1" BSPT/NPT external thread	1/2" BSPT/NPT internal thread	14	
		1 1/4" BSPT/NPT external thread	3/4" BSPT/NPT internal thread		
YJ28-SB-700	700	1" BSPT/NPT external thread	1/2" BSPT/NPT internal thread	14	1254a/02
		1 1/4" BSPT/NPT external thread	3/4" BSPT/NPT internal thread		
YJ28-SB-1000	1000	1" BSPT/NPT external thread	1/2" BSPT/NPT internal thread	14	
		1 1/4" BSPT/NPT external thread	3/4" BSPT/NPT internal thread		

PART 3: SECTION 8.2

FLEXIBLE DROPS

Product Name	Length (mm)	Nominal Size / Connection Supply	Nominal Size / Connection Outlet	Maximum Working Pressure (bar)	LPCB Ref. No.
YJ28-SB-1200	1200	1" BSPT/NPT external thread	½" BSPT/NPT internal thread	14	
		1¼" BSPT/NPT external thread	¾" BSPT/NPT internal thread		
YJ28-SB-1500	1500	1" BSPT/NPT external thread	½" BSPT/NPT internal thread	14	
		1¼" BSPT/NPT external thread	¾" BSPT/NPT internal thread		
YJ28-SB-1800	1800	1" BSPT/NPT external thread	½" BSPT/NPT internal thread	14	
		1¼" BSPT/NPT external thread	¾" BSPT/NPT internal thread		

PART 3: SECTION 8.3

LIGHTWEIGHT PIPEWORK SYSTEMS

This section lists products approved in accordance with:

- LPCB Schedule of requirements

Lightweight Pipework Systems listed below are considered acceptable for use in installations conforming to the *LPC Rules for Automatic Sprinkler Installations*. The products shall be installed and maintained in accordance with the manufacturer's instructions.

Aalberts Integrated Piping Systems B.V.

Oude Amersfoortseweg 99, 1212 AA, Hilversum, The Netherlands

Tel: +31 35 6884 330 • Fax: +31 35 6884 379

E-mail: info.nl@aalberts-ips.com • Website: www.vsh.eu

Certificate No: 1033a to TS1599: Issue draft 5

VSH XPress Lightweight Galvanized Steel Pipework System

Product Name	Description	Size/mm	LPCB Ref. No.
C 1461	Galvanised tube	22, 28, 35, 42, 54	1033a/01
C 1401	Straight Coupling (2 x Press)	22, 28, 35, 42, 54	1033a/02
C 1403	Slip Coupling (2 x Press)	22, 28, 35, 42, 54	1033a/03
C 1408	90° Elbow (2 x Press)	22, 28, 35, 42, 54	1033a/04
C 1411	90° Elbow (Press x plain end)	22, 28, 35, 42, 54	1033a/05
C 1413	45° Elbow (2 x Press)	22, 28, 35, 42, 54	1033a/06
C 1412	45° Elbow (Press x plain end)	22, 28, 35, 42, 54	1033a/07
C 1425	90° Bend (2 x plain end)	22, 28, 35, 42, 54	1033a/08
C 1417	Cross over (2 x plain end)	22, 28	1033a/09
C 1414	Tee equal (3 x Press)	22, 28, 35, 42, 54	1033a/10
C 1415	Tee reduced (3 x Press)	22x28x22, 28x22x28, 35x22x35, 35x28x35, 42x22x42, 42x28x42, 42x35x42, 54x22x54, 54x28x54, 54x35x54, 54x42x54	1033a/11
C 1418	Tee threaded (press x fem. thread x press)	22x1/2"x22, 22x3/4"x22, 28x1/2"x28, 28x3/4"x28, 28x1"x28, 35x1/2"x35, 35x3/4"x35, 35x1x35, 42x1/2"x42, 42x3/4"x42, 42x1"x42, 54x1/2"x54, 54x3/4"x54, 54x1"x54	1033a/12
C 1407	Reducer (Plain end x Press)	28x22, 35x22, 35x28, 42x28, 42x35, 54x35, 54x42	1033a/13
C 1439	Reducer (2 x Press)	28x22	1033a/14
C 1433	Straight connector (plain end x female thread)	22x1/2", 22x3/4"	1033a/15
C 1402	Straight connector (press x female thread)	22x1/2", 22x3/4", 28x1/2", 28x3/4", 28x1", 35x1/2", 35x3/4", 35x1", 35x1 1/4", 42x1 1/2", 54x2"	1033a/16
C 1405	Straight connector (press x male thread)	22x1/2", 22x3/4", 22x1", 28 x 3/4", 28x1", 35x1", 35x1 1/4", 42x1 1/2", 54x2"	1033a/17
C 1435	Straight union (Press x male thread)	22x3/4", 28x1", 35x1 1/4", 42x1 1/2", 54x2"	1033a/18
C 1428	90° Angle adaptor (Press x male thread)	22x3/4"	1033a/19
C 1430	90° Elbow (Press x male thread)	22x3/4", 28x1", 35x1 1/4", 42x1 1/2", 54x2"	1033a/20
C 1438	90° Elbow (Press x female thread)	22x1/2", 22x3/4", 28x1/2", 28x3/4", 28x1", 35x1/2", 35x3/4", 35x1"	1033a/21
C 1442	Transition connector (press x grooved)	28x33.7, 35x42.4, 42x48.3, 54x60.3	1033a/22
C 1429	Stop end (1 x press)	22, 28, 35, 42, 54	1033a/23
C 1443	Slip coupling (press x female thread)	22x1/2", 22x3/4", 28x1/2", 28x3/4"	1033a/24
C 1409	Angle adaptor (press x female thread)	22x1/2", 28x1/2", 35x1/2"	1033a/25
C 1444	Straight union (press x female thread)	22x3/4", 28x1", 35x1 1/4", 42x1 1/2", 54x2"	1033a/26
C 1446	Coupling with nut (press x female thread)	22, 28, 35, 42, 54	1033a/27

PART 3: SECTION 8.3
LIGHTWEIGHT PIPEWORK SYSTEMS

Certificate No: 1033b to TS1599: Issue draft 5

VSH XPress Lightweight Stainless Steel Pipework System

Product Name	Description	Size/mm	LPCB Ref. No.
R 2750	Stainless steel tube 1.4401	22, 28, 35, 42, 54	1033b/01
R 2752	Stainless steel tube 1.4521	22, 28, 35, 42, 54	
R 2753	Stainless steel tube 1.4520	22, 28, 35, 42, 54	
R 2701	Straight Coupling (2 x Press)	22, 28, 35, 42, 54	1033b/02
R 2703	Slip Coupling (2 x Press)	22, 28, 35, 42, 54	1033b/03
R 2708	90° Elbow (2 x Press)	22, 28, 35, 42, 54	1033b/04
R 2711	90° Elbow (Press x plain end)	22, 28, 35, 42, 54	1033b/05
R 2713	45° Elbow (2 x Press)	22, 28, 35, 42, 54	1033b/06
R 2712	45° Elbow (Press x plain end)	22, 28, 35, 42, 54	1033b/07
R 2725	90° Bend (2 x plain end)	22, 28, 35, 42, 54	1033b/08
R 2724	60° Bend (2 x plain end)	28, 35, 42, 54	1033b/09
R 2723	30° Bend (2 x plain end)	28, 35, 42, 54	1033b/10
R 2722	15° Bend (2 x plain end)	28, 35, 42, 54	1033b/11
R 2717	Cross over (2 x plain end)	22, 28	1033b/12
R 2714	Tee equal (3 x Press)	22, 28, 35, 42, 54	1033b/13
R 2715	Tee reduced (3 x Press)	28x22x28, 35x22x35, 35x28x35, 42x22x42, 42x28x42, 42x35x42, 54x22x54, 54x28x54, 54x35x54, 54x42x54	1033b/14
R 2718	Tee threaded (Press x fem. thread x Press)	22x1/2"x22, 22x3/4"x22, 28x1/2"x28, 28x3/4"x28, 28x1"x28, 35x1/2"x35, 35x3/4"x35, 35x1x35, 42x1/2"x42, 42x3/4"x42, 42x1"x42, 54x1/2"x54, 54x3/4"x54, 54x1"x54, 54x2"x54	1033b/15
R 2707	Reducer (Plain end x Press)	28x22, 35x22, 35x28, 42x28, 42x35, 54x35, 54x42	1033b/16
R 2702	Straight connector (Press x female thread)	22x1/2", 22x3/4", 22x1", 28x1/2", 28x3/4", 28x1", 28x1 1/4", 35x1", 35x1 1/4", 35x1 1/2", 42x1 1/4", 42x1 1/2", 54x1 1/2", 54x2"	1033b/17
R 2705	Straight connector (Press x male thread)	22x 1/2", 22x 3/4", 22x1", 28x3/4", 28x1", 28x1 1/4", 35x1", 35x1 1/4", 35x1 1/2", 42x1 1/4", 42x1 1/2", 54x1 1/2", 54x2"	1033b/18
R 2735	Straight union (Press x male thread)	22x1/2", 22x3/4", 22x1", 28x1", 35x1 1/4", 42x1 1/2", 54x2"	1033b/19
R 2738	Straight union (Press x female thread)	22x3/4", 22x1", 28x1", 35x1 1/4", 42x1 1/2", 54x2"	1033b/20
R 2728	90° Angle adaptor (Press x male thread)	22x3/4", 28x1", 35x1 1/4", 42x1 1/2", 54x2"	1033b/21
R 2709	90° Angle adaptor (Press x female thread)	22x1/2", 22x3/4", 28x1/2", 28x3/4", 28x1", 35x1 1/2", 35x3/4", 35x1", 35x1 1/4"	1033b/22
R 2704	Coupling with nut (press x female thread)	22, 28, 35, 42, 54	1033b/23
R 2726	Flanged connector (press x flange)	22, 28, 35, 42, 54	1033b/24
R 2748	Transition connector (press x grooved)	28x33.7, 35x42.4, 42x48.3, 54x60.3	1033b/25
R 2729	Stop end (1 x press)	22, 28, 35, 42, 54	1033b/26
R 2741	Slip coupling (press x female thread)	22x1/2", 22x3/4", 28x1/2", 28x3/4"	1033b/27
R 2736	Coupling (press x flat seal)	22x1 1/4", 22x1 1/2", 28x1 1/2", 35x2", 42x2 1/4", 54x2 3/4"	1033b/28

PART 3: SECTION 8.3

LIGHTWEIGHT PIPEWORK SYSTEMS

Geberit Mapress GmbH

40764 Langenfeld, Germany

Tel: 01926 516 800 • Fax: 01926 516 809

Website: www.geberit.co.uk

Certificate No: 1031a to TS1599 v5

Geberit Mapress Press-Fit Lightweight Galvanized Steel Sprinkler Pipework System

Product Name	Size / mm	LPCB Ref. No.
Pipe	22, 28, 35, 42, 54, 76.1, 88.9, 108	1031a/01
Coupling	22, 28, 35, 42, 54, 76.1, 88.9, 108	1031a/02
Slip Coupling	22, 28, 35, 42, 54, 76.1, 88.9, 108	1031a/03
Bend 90°	22, 28, 35, 42, 54, 76.1, 88.9, 108	1031a/04
Bend 90° with plain end	22, 28, 35, 42, 54, 76.1, 88.9, 108	1031a/05
Bend 45°	22, 28, 35, 42, 54, 76.1, 88.9, 108	1031a/06
Bend 45° with plain end	22, 28, 35, 42, 54, 76.1, 88.9, 108	1031a/07
Reducer with plain end	28x22, 35x22, 35x28, 42x28, 42x35, 54x35, 54x42, 76.1x54, 88.9x54	1031a/08
T-piece equal	88.9x76.1, 108x76.1, 108x88.9	1031a/09
T-piece reduced	22, 28, 35, 42, 54, 76.1, 88.9, 108	1031a/10
T-piece with female thread	28x22x28, 35x22x35, 35x28x35, 42x22x42 42x28x42, 42x35x42, 54x22x54, 54x28x54 54x35x54, 54x42x54, 76.1x22x76.1, 76.1x28x76.1 76.1x35x76.1, 76.1x42x76.1, 76.1x54x76.1, 88.9x22x88.9 88.9x28x88.9, 88.9x35x88.9, 88.9x42x88.9, 88.9x54x88.9 88.9x76.1x88.9, 108x22x108, 108x28x108, 108x35x108 108x42x108, 108x54x108, 108x76.1x108, 108x88.9x108	1031a/11
Adaptor with male thread	22x1/2", 22x3/4", 22x1", 28x3/4", 28x1", 28x1 1/4", 35x1 1/4", 35x1 1/2", 42x 1 1/4", 42x1 1/2", 54x1 1/2", 54x2", 76.1x2 1/2", 88.9x3"	1031a/12
Adaptor with female thread	22x3/4", 28x1/2", 28x1"	1031a/13
Adaptor with plain and welding end	15, 18, 22, 28, 35, 42, 54	1031a/14
Adaptor for groove systems	54	1031a/15
Adaptor with brass union nut	22x1", 22x 1 1/4", 22x 1 1/2", 28x1", 28x1 1/4", 28x1 1/2", 35x1 1/2", 35x2", 42x1 3/4", 42x2", 42x 2 1/4", 42x 2 3/8", 42x 2 1/2", 54x 2 1/2", 54x 2 3/4"	1031a/16
Adaptor union with male thread	22x3/4", 28x1", 35x1 1/4", 42x1 1/2", 54x2"	1031a/17
Adaptor union with female thread, nut made of stainless steel	22x3/4", 22x1", 28x1", 35x1 1/4", 42x1 1/2", 54x2"	1031a/18
Elbow adaptor 90° with male thread	22x3/4"	1031a/19
Elbow adaptor 90° with female thread	28x1/2"	1031a/20
Bend adaptor 90° with female thread	22x3/4", 28x1/2"	1031a/21
Straight union with press fittings on both ends	22, 28, 35, 42, 54	1031a/22
Flange PN 10 / 16 with pressing socket	76.1, 88.9, 108	1031a/23
Cap	22, 28, 35, 42, 54	1031a/24

Certificate No: 1031b to TS1599 v5

Geberit Mapress Press-Fit Lightweight Stainless Steel Sprinkler Pipework System

Product Name	Size / mm	LPCB Ref. No.
Pipe	22, 28, 35, 42, 54, 76.1, 88.9, 108	1031b/01
Coupling	22, 28, 35, 42, 54, 76.1, 88.9, 108	1031b/02
Slip Coupling	22, 28, 35, 42, 54, 76.1, 88.9, 108	1031b/03
Bend 90°	22, 28, 35, 42, 54, 76.1, 88.9, 108	1031b/04

PART 3: SECTION 8.3
LIGHTWEIGHT PIPEWORK SYSTEMS

Product Name	Size / mm	LPCB Ref. No.
Bend 90° with plain end	22, 28, 35, 42, 54, 76.1, 88.9, 108	1031b/05
Bend 45°	22, 28, 35, 42, 54, 76.1, 88.9, 108	1031b/06
Bend 45° with plain end	22, 28, 35, 42, 54, 76.1, 88.9, 108	1031b/07
Reducer with plain end	28x22, 35x22, 35x28, 42x28, 42x35, 54x35, 54x42, 76.1x54, 88.9x54, 88.9x76.1, 108x76.1, 108x88.9	1031b/08
T-piece equal	22, 28, 35, 42, 54, 76.1, 88.9, 108	1031b/09
T-piece reduced	28x22x28, 35x22x35, 35x28x35, 42x22x42, 42x28x42, 42x35x42, 54x22x54, 54x28x54, 54x35x54, 54x42x54, 76.1x22x76.1, 76.1x28x76.1, 76.1x35x76.1, 76.1x42x76.1, 76.1x54x76.1, 88.9x22x88.9, 88.9x28x88.9, 88.9x35x88.9, 88.9x42x88.9, 88.9x54x88.9, 88.9x76.1x88.9, 108x22x108, 108x28x108, 108x35x108, 108x42x108, 108x54x108, 108x76.1x108, 108x88.9x108	1031b/10
T-piece with female thread	22x1/2"x22, 22x3/4"x22, 28x1/2"x28, 28x3/4"x28, 28x1"x28, 35x1/2"x35, 35x3/4"x35, 42x1/2"x42, 42x3/4"x42, 54x1/2"x54, 54x3/4"x54, 54x2"x54, 76.1x3/4"x76.1, 76.1x2"x76.1, 88.9x3/4"x88.9, 88.9x2"x88.9, 108x3/4"x108, 108x2"x108	1031b/11
Adaptor with male thread	22x1/2", 22x3/4", 22x1", 28x3/4", 28x1", 28x1 1/4", 35x1", 35x1 1/4", 35x1 1/2", 42x 1 1/4", 42x1 1/2", 54x1 1/2", 54x2", 76.1x2 1/2", 88.9x3"	1031b/12
Adaptor with female thread	22x1/2", 22x3/4", 22x1", 28x1/2", 28x3/4", 28x1", 28x1 1/4", 35x1", 35x1 1/4", 35x1 1/2", 42x 1 1/4", 42x1 1/2", 54x1 1/2", 54x2"	1031b/13
Adaptor with brass union nut	22x1", 22x 1 1/4", 22x 1 1/2", 28x1", 28x1 1/4", 28x1 1/2", 35x1 1/2", 42x1 3/4", 54x2 3/8", 76.1x3", 88.9x3 1/2"	1031b/14
Adaptor with stainless steel union nut	22x1", 28x1 1/2"	1031b/15
Adaptor union with male thread, nut made of stainless steel	22x1/2", 22x3/4", 22x1", 28x1/2", 28x3/4", 28x1", 35x1 1/4", 42x1 1/2", 54x2"	1031b/16
Adaptor union with male thread, nut made of brass	22x1/2", 22x3/4", 22x1", 28x1", 35x1 1/4", 42x1 1/2", 54x2"	1031b/17
Adaptor union with female thread, nut made of brass	22x3/4", 22x1", 28x1", 35x1 1/4", 42x 1 1/2", 54x2"	1031b/18
Adaptor union with female thread, nut made of stainless steel	22x3/4", 22x1", 28x1", 35x1 1/4", 42x1 1/2", 54x2"	1031b/19
Elbow adaptor 90° with male thread	22x3/4", 28x1", 35x1 1/4", 42x1 1/2", 54x2"	1031b/20
Elbow adaptor 90° with female thread	22x3/4", 28x1", 35x1 1/4"	1031b/21
Straight union with press fittings on both ends	22, 28, 35, 42, 54	1031b/22
Flange PN 10 / 16 with pressing socket	22, 28, 35, 42, 54, 76.1, 88.9, 108	1031b/23
Cap	22, 28, 35, 42, 54	1031b/24

Tyco Building Services Products B.V. part of the Johnson Controls group of Companies

Kopersteden 1, 7547 TJ Enschede, The Netherlands

Tel: +31 53 4284444 • Fax: +31 53 4283377

E-mail: info-NL@tyco-bspd.com • Website: www.tycobuilding.com

Certificate No: 169f to TS1599: Issue draft 5

'Grinnell' G-Press Lightweight Galvanised Steel Sprinkler Pipework System

Product Name	Description	Size (mm)	LPCB Ref. No.
Pipe CS	Galvanised tube	22, 28, 35, 42, 54	169f/01
G05	Straight Coupling (2 x press)	22, 28, 35, 42, 54	169f/02
G10	Slip Coupling (2 x press)	22, 28, 35, 42, 54	169f/03
G15	90° Elbow (2 x press)	22, 28, 35, 42, 54	169f/04
G16	90° Elbow (press x plain end)	22, 28, 35, 42, 54	169f/05
G20	45° Elbow (2 x press)	22, 28, 35, 42, 54	169f/06

PART 3: SECTION 8.3

LIGHTWEIGHT PIPEWORK SYSTEMS

Product Name	Description	Size (mm)	LPCB Ref. No.
G21	45° Elbow (press x plain end)	22, 28, 35, 42, 54	169f/07
G25	90° Bend (2 x plain end)	22, 28, 35, 42, 54	169f/08
G30	Cross over (2 x plain end)	22, 28	169f/09
G35	Tee equal (3 x press)	22, 28, 35, 42, 54	169f/10
G36	Tee reduced (3 x press)	22x28x22, 28x22x28, 35x22x35, 35x28x35, 42x22x42, 42x28x42, 42x35x42, 54x22x54, 54x28x54, 54x35x54, 54x42x54	169f/11
G37	Tee threaded (press x fem. thread x press)	22x1/2"x22, 22x3/4"x22, 28x1/2"x28, 28x3/4"x28, 28x1"x28, 35x1/2"x35, 35x3/4"x35, 35x1"x35, 42x1/2"x42, 42x3/4"x42, 42x1"x42, 54x1/2"x54, 54x3/4"x54, 54x1"x54	169f/12
G40	Reducer (plain end x press)	28x22, 35x22, 35x28, 42x28, 42x35, 54x35, 54x42,	169f/13
G41	Reducer (2 x press)	28x22	169f/14
G51	Straight connector (plain end x female thread)	22x1/2", 22x3/4"	169f/15
G46	Straight connector (press x female thread)	22x1/2", 22x3/4", 28x1/2", 28x3/4", 28x1", 35x1/2", 35x3/4", 35x1", 35x1 1/4", 42x1 1/2", 54x2"	169f/16
G45	Straight connector (press x male thread)	22x1/2", 22x3/4", 22x1", 28x3/4", 28x1", 35x1", 35x1 1/4", 42x1 1/2", 54x2"	169f/17
G47	Straight union (press x male thread)	22x3/4", 28x1", 35x1 1/4", 42x1 1/2", 54x2"	169f/18
G19	90° Angle adaptor (press x male thread)	22x3/4"	169f/19
G17	90° Elbow (press x male thread)	22x3/4", 28x1", 35x1 1/4", 42x1 1/2", 54x2"	169f/20
G18	90° Elbow (press x female thread)	22x1/2", 22x3/4", 28x1/2", 28x3/4", 28x1", 35x1/2", 35x3/4", 35x1"	169f/21
G48	Transition connector (press x grooved)	28x33.7, 35x42.4, 42x48.3, 54x60.3	169f/22
G50	Stop end (1 x press)	22, 28, 35, 42, 54	169f/23
G11	Slip coupling (press x female thread)	22x1/2", 22x3/4", 28x1/2", 28x3/4"	169f/24

Certificate No: 169g to TS1599: Issue draft 5

'Grinnell' G-Press Lightweight Stainless Steel Sprinkler Pipework System

Product Name	Description	Size (mm)	LPCB Ref. No.
PIPE SS1	Stainless steel tube 1.4401	22, 28, 35, 42, 54	169g/01
PIPE SS2	Stainless steel tube 1.4520	22, 28, 35, 42, 54	
PIPE SS3	Stainless steel tube 1.4521	22, 28, 35, 42, 54	
G05S	Straight Coupling (2 x Press)	22, 28, 35, 42, 54	169g/02
G10S	Slip Coupling (2 x Press)	22, 28, 35, 42, 54	169g/03
G15S	90° Elbow (2 x Press)	22, 28, 35, 42, 54	169g/04
G16S	90° Elbow (Press x plain end)	22, 28, 35, 42, 54	169g/05
G20S	45° Elbow (2 x Press)	22, 28, 35, 42, 54	169g/06
G21S	45° Elbow (Press x plain end)	22, 28, 35, 42, 54	169g/07
G25S	90° Bend (2 x plain end)	22, 28, 35, 42, 54	169g/08
G26S	60° Bend (2 x plain end)	28, 35, 42, 54	169g/09

PART 3: SECTION 8.3
LIGHTWEIGHT PIPEWORK SYSTEMS

Product Name	Description	Size (mm)	LPCB Ref. No.
G27S	30° Bend (2 x plain end)	28, 35, 42, 54	169g/10
G28S	15° Bend (2 x plain end)	28, 35, 42, 54	169g/11
G30S	Cross over (2 x plain end)	22, 28	169g/12
G35S	Tee equal (3 x Press)	22, 28, 35, 42, 54	169g/13
G36S	Tee reduced (3 x Press)	28x22x28, 35x22x35, 35x28x35, 42x22x42, 42x28x42, 42x35x42, 54x22x54, 54x28x54, 54x35x54, 54x42x54	169g/14
G37S	Tee threaded (Press x fem. thread x Press)	22x1/2"x22, 22x3/4"x22, 28x1/2"x28, 28x3/4"x28, 28x1"x28, 35x1/2"x35, 35x3/4"x35, 35x1"x35, 42x1/2"x42, 42x3/4"x42, 42x1"x42, 54x1/2"x54, 54x3/4"x54, 54x1"x54, 54x2"x54	169g/15
G40S	Reducer (Large Plain end x Press)	28x22, 35x22, 35x28, 42x28, 42x35, 54x35, 54x42,	169g/16
G46S	Straight connector (Press x female thread)	22x1/2", 22x3/4", 22x1", 28x1/2", 28x3/4", 28x1", 28x1 1/4", 35x1", 35x1 1/4", 35x1 1/2", 42x1 1/4", 42x1 1/2", 54x1 1/2", 54x2"	169g/17
G45S	Straight connector (Press x male thread)	22x1/2", 22x3/4", 22x1", 28x3/4", 28x1", 28x1 1/4", 35x1", 35x1 1/4", 35x1 1/2", 42x1 1/4", 42x1 1/2", 54x1 1/2", 54x2"	169g/18
G47S	Straight union (Press x male thread)	22x1/2", 22x3/4", 22x1", 28x1", 35x1 1/4", 42x1 1/2", 54x2"	169g/19
G51S	Straight union (Press x female thread)	22x3/4", 22x1", 28x1", 35x1 1/4", 42x1 1/2", 54x2"	169g/20
G17S	90° Elbow (Press x male thread)	22x3/4", 28x1", 35x1 1/4", 42x1 1/2", 54x2"	169g/21
G18S	90° Elbow (Press x female thread)	22x1/2", 22x3/4", 28x1/2", 28x3/4", 28x1", 35x1 1/2", 35x3/4", 35x1", 35x1 1/4"	169g/22
G48S	Transition connector (Press x grooved)	28x33.7, 35x42.4, 42x48.3, 54x60.3	169g/25
G50S	Stop end (1 x press)	22, 28, 35, 42, 54	169g/26
G11S	Slip coupling (press x female thread)	22x1/2", 22x3/4", 28x1/2", 28x3/4"	169g/27

PART 3: SECTION 9.1

PRE-ACTION CONTROL SYSTEMS

This section lists products approved in accordance with:

- LPCB Schedule of requirements

Pre-action control systems for use under the *LPC Rules for Automatic Sprinkler Installations* have been approved to a schedule of requirements developed by LPCB (please contact LPCB for further details). The products shall be installed and maintained in accordance with the manufacturer's instructions.

The Reliable Automatic Sprinkler Co., Inc,

1470 Smith Grove Road, Liberty, South Carolina 29657, USA

Tel: +1 864 843 1734 • Fax: +1 864 843 1418

E-mail: jcevallos@reliablesprinkler.com • Website: www.reliablesprinkler.com

UK Sales Enquiries

Tel: +44 (0)1372 728899 • Fax: +44 (0)1372 724461

Certificate No: 034d to an LPCB Technical Approval for Pre-Action Systems

Certificate No: 034m to an LPCB Technical Approval for Pre-Action Systems

RELIABLE SINGLE INTERLOCK PRE-ACTION SYSTEM (Pre-action Control Valve Description)

Product Name	Size(s) (mm)	Mounting Attitude	Body Material	Type	Maximum Working Pressure	Flanged or Grooved	LPCB Ref. No.
BX/E	100	Vertical	Cast Iron	Pre-action	12 bar	Flanged	034d/01
	150	Vertical	Cast Iron	Pre-action	12 bar	Flanged	
DDX 4"	100	Verticle	Ductile Iron	Pre-action	17.2	Grooved	034m/01
DDX 6"	150	Verticle	Ductile Iron	Pre-action	17.2	Grooved	
DDX 165mm	165	Verticle	Ductile Iron	Pre-action	17.2	Grooved	

Certificate No: 034d

RELIABLE SINGLE INTERLOCK PRE-ACTION SYSTEM (Solenoid Valve Description)

Product Name	Manufacturer	Voltage (V)	Power (W)	LPCB Ref. No.
LV2LBX25	Skinner	24 DC	11	034d/01
R8210A107	ASCO	24 DC	10.6	

Approval Conditions:

- 1) The above pre-action system employs duplicate solenoid valves, which are manufactured by firms, as detailed above. One of each shall be used.
- 2) Solenoid valves shall be installed in parallel.
- 3) Solenoid valves shall function in pneumatic condition only, and be protected by a strainer.
- 4) LPCB Certificated detectors compatible with the control and indicating equipment shall be used.
- 5) Suitable electrical detection control and indicating equipment and pneumatic systems which are compatible with the equipment identified above shall be used. The control and indicating equipment should be LPCB approved/certificated.
- 6) Connecting cables shall comply with BS 6387: 1994, classification C, W, Z evidenced by LPCB certification.
- 7) The system shall be electrically monitored to demonstrate that it is in a 'ready-to-operate' state at all times.
- 8) Clean dry air shall be used.
- 9) The equipment must be installed, operated and maintained as prescribed in The Reliable Automatic Sprinkler Co Inc installation, operating and maintenance manual.
- 10) The pre-action system shall be configured in accordance with Reliable specifications.
- 11) The pre-action systems shall comply with the details specified in LPC Technical Bulletin 21 Supplementary Requirements for sprinkler installations which can operate in the dry mode and in the LPC Rules for Automatic Sprinkler Installations.
- 12) The Reliable Automatic Sprinkler Company Inc are the firm responsible for the complete pre-action station, including electrics. It should be noted that only the equipment specifically referenced above under (a) and (b) is LPCB approved.

Certificate No: 034t to LPS 2071 Issue 01

Pre-Action Control Systems

Product Name	Size	Mounting Attitude	Body material	Maximum working Pressure (bar)	Connections	LPCB Ref. No.
EX	2	Vertical/Horizontal	Ductile Iron	20.7	Grooved	034t/01
	2 1/2"	Vertical/Horizontal	Ductile Iron	20.7	Grooved	034t/02
	76mm	Vertical/Horizontal	Ductile Iron	20.7	Grooved	034t/03
	4	Vertical/Horizontal	Ductile Iron	20.7	Grooved	034t/04
	6	Vertical/Horizontal	Ductile Iron	20.7	Grooved	034t/05
	165mm	Vertical/Horizontal	Ductile Iron	20.7	Grooved	034t/06
	8	Vertical/Horizontal	Ductile Iron	20.7	Grooved	034t/07

The Viking Corporation

210 N Industrial Park, Hastings, Michigan 49058, USA
 Tel: +1 269 945 9501 • Fax: +1 269 945 9599
 E-mail: techsvcs@vikingcorp.com • Website: www.vikingcorp.com

Certificate No: 096f to an LPCB Technical Approval for Pre-Action Systems

Viking Pre-Action Systems (Pre-Action Control Valves descriptions)

Product Name	Size(s) (mm)	Mounting Attitude	Body Material	Type	Maximum Working Pressure (bar)	Connections	LPCB Ref. No.
Non-Interlocked, Single or Double Interlocked Pre-action system	40, 50, 65	Vertical	Ductile Iron	F-1	16	Screwed / Screwed	096f/07
				J-1			
				J-2			
	80, 100, 150	Vertical	Ductile Iron	F-1	16	Flanged / Grooved	096f/08
				F-2			
				J-1			
80, 100, 150, 200	Vertical	Ductile Iron	F-1	16	Flanged / Flanged	096f/09	
			F-2				
			J-1				
			J-2		Grooved / Grooved		

Victaulic Company

4901 Kesslersville Road, Easton, Pennsylvania 18040, USA
 Tel: +1 610 559 3300 • Fax: +1 610 250 8817
 E-mail: victaulic@victaulic.com • Website: www.victaulic.com

Certificate No: 104k to an LPCB Technical Approval for Pre-Action Systems

Victaulic Series 769 & 769N Pre-Action System (Pre-action Control Valve Description)

Product Name	Nominal Size	Mounting Attitude	Body Material	Type	Max Working Pressure (bar)	Connections	LPCB Ref. No.
Series 769 Single Interlock (Electric)	40, 50, 65, 76.1, 80, 100, 150, 165.1, 200	Vertical	Cast Iron	Pre-action	20	Grooved	104k/01
Series 769 Single Interlock (Pneumatic/Electric)	40, 50, 65, 76.1, 80, 100, 150, 165.1, 200	Vertical	Cast Iron	Pre-action	20	Grooved	104k/02
Series 769 Double Interlock	40, 50, 65, 76.1, 80, 100, 150, 165.1, 200	Vertical	Cast Iron	Pre-action	20	Grooved	104k/03
Series 769N Single Interlock (Electric)	40, 50, 65, 80, 100, 150 & 200	Vertical	Cast Iron	Pre-action	20	Grooved	104k/06
Series 769N Single Interlock (Pneumatic/Electric)	40, 50, 65, 80, 100, 150 & 200	Vertical	Cast Iron	Pre-action	20	Grooved	104k/07

PART 3: SECTION 9.1

PRE-ACTION CONTROL SYSTEMS

Product Name	Nominal Size	Mounting Attitude	Body Material	Type	Max Working Pressure (bar)	Connections	LPCB Ref. No.
Series 769N Double Interlock	40, 50, 65, 80, 100, 150 & 200	Vertical	Cast Iron	Pre-action	20	Grooved	104k/08

This section lists products approved in accordance with:

- LPCB Schedule of requirements

Pressure switches for use under *LPC Rules for Automatic Sprinkler Installations* have been approved to a schedule of requirements developed by LPCB. The products shall be installed and maintained in accordance with the manufacturer's instructions.

Bailey & Mackey Limited

Baltimore Road, Birmingham B42 1DE, United Kingdom
 Tel: +44 (0)121 357 5351 • Fax: +44 (0)121 357 8319
 E-mail: enquiries@baileymackey.com • Website: www.baileymackey.com

Certificate No: 085a to LPS 1226 Draft B

Pressure switches

Product Name	Maximum Rated Working Pressure (bar)	Maximum Rated Current and Voltage AC	Maximum Rated Current and Voltage DC	LPCB Ref. No.
Type 1381	17.2	5 Amps @ 250 Volts	1 Amp @ 30 Volts	085a/01
Type 1381P	17.2	5 Amps @ 250 Volts	1 Amp @ 30 Volts	
Type 1381V	17.2	5 Amps @ 250 Volts	1 Amp @ 30 Volts	
Type 1381PV	17.2	5 Amps @ 250 Volts	1 Amp @ 30 Volts	
Type 1391	17.2	5 Amps @ 250 Volts	1 Amp @ 30 Volts	085a/03
Type 1391P	17.2	5 Amps @ 250 Volts	1 Amp @ 30 Volts	
Type 1391V	17.2	5 Amps @ 250 Volts	1 Amp @ 30 Volts	
Type 1391PV	17.2	5 Amps @ 250 Volts	1 Amp @ 30 Volts	

Potter Electric Signal Company LLC

1609 Park 370 Place, Hazelwood, St Louis, Missouri 63042, USA
 Tel: +1 314 595 6900 • Fax: +1 314 595 6999
 E-mail: info@pottersignal.com • Website: www.pottersignal.com

Certificate No: 125a to LPS 1226 Draft 1

Pressure Switches

Product Name	Maximum Rated Working Pressure (bar)	Maximum Rated Current and Voltage AC	Maximum Rated Current and Voltage DC	LPCB Ref. No.
Model PS10-1	17.2	10.1 Amps @ 125/250 Volts	2 Amps @ 30 Volts	125a/05
Model PS10-2	17.2	10.1 Amps @ 125/250 Volts	2 Amps @ 30 Volts	125a/06
Model PS40-1	17.2	10.1 Amps @ 125/250 Volts	2 Amps @ 30 Volts	125a/07
Model PS40-2	17.2	10.1 Amps @ 125/250 Volts	2 Amps @ 30 Volts	125a/08
Model PS100-2	17.2	10.1 Amps @ 125/250 Volts	2 Amps @ 30 Volts	125a/09
Model PS120-1	17.2	10.1 Amps @ 125/250 Volts	2 Amps @ 30 Volts	125a/10
Model PS120-2	17.2	10.1 Amps @ 125/250 Volts	2 Amps @ 30 Volts	125a/11
Model PS15-2	17.2	10.1 Amps @ 125/250 Volts	2 Amps @ 30 Volts	125a/12
Model PS25-2	17.2	10.1 Amps @ 125/250 Volts	2 Amps @ 30 Volts	125a/13

PART 3: SECTION 10

PRESSURE SWITCHES

Tyco Fire & Building Products (Part of the Johnson Control Group of Companies (Cranston))

Research & Development Center, 1467 Elmwood Avenue, Cranston, RI 02910, USA

Tel: +1 401 781 8220 • Fax: +1 401 781 7317

E-mail: Bob.Bandura@jci.com

Certificate No: 570a to LPS 1226 Issue 1 Draft

Pressure Switches

Product Name	Maximum Rated Working Pressure (bar)	Maximum Rated Current and Voltage AC	Maximum Rated Current and Voltage DC	LPCB Ref. No.
TPS10-1	16	10A 125/250VAC	2.5A 30VDC	570a/01
TPS10-2	16	10A 125/250VAC	2.5A 30VDC	570a/02
TPS40-1	16	10A 125/250VAC	2.5A 30VDC	570a/03
TPS40-2	16	10A 125/250VAC	2.5A 30VDC	570a/04
TPS120-1	16	10A 125/250VAC	2.5A 30VDC	570a/05
TPS120-2	16	10A 125/250VAC	2.5A 30VDC	570a/06

Weflo Valve Co. Ltd.

789 Chunyang Road, Qingdao Nat'l High-Tech Ind Dev Zone, Qingdao, Shangdong 266111, China

Tel: +86-532-8790 5016 • Fax: +86-532-8790 5015

E-mail: Zhang.H.T@weflovalve.com • Website: www.weflovalve.com

Certificate No: 1725a to LPS1226 Issue 1 Draft

Pressure Switches

Product Name	Maximum Rated Working Pressure (bar)	Maximum Rated Current and Voltage AC	Maximum Rated Current and Voltage DC	LPCB Ref. No.
WPS10-1	16	10A 125/250VAC	2.5A 30VDC	1725a/01
WPS10-2	16	10A 125/250VAC	2.5A 30VDC	1725a/02
WPS40-1	16	10A 125/250VAC	2.5A 30VDC	1725a /03
WPS40-2	16	10A 125/250VAC	2.5A 30VDC	1725a /04
WPS120-1	16	10A 125/250VAC	2.5A 30VDC	1725a /05
WPS120-2	16	10A 125/250VAC	2.5A 30VDC	1725a /06

This section lists products approved in accordance with:

- EN 12259-1 *Fixed firefighting systems. Components for sprinkler and water spray systems. Sprinklers*
- LPS 1039 *Requirements and testing methods for automatic sprinklers*
- LPCB Schedule of requirements

LPCB recommends the removal and testing of sprinkler heads from a system after 25 years and every 5 years thereafter. The areas from which the sprinkler heads are removed should take account of the different makes and models used and variation of atmospheric conditions. LPCB further recommends that sprinkler heads are replaced where problems are found.

KEY to abbreviations

Each entry includes the nominal orifice size in millimetres and the temperature ratings in degrees centigrade.

- † indicates glass bulb sprinkler head; all others are fusible element sprinkler heads.
- indicates that a corrosion-resistant coating for the body and yoke of the sprinkler has been approved under the *LPC Rules for Automatic Sprinkler Installations*.

The type of sprinkler is indicated by the following abbreviations:

Type	LPS	EN 12259-1
Conventional (upright and pendent)	CUP, CU/P	CUP
Conventional (Upright)	CU	CU
Conventional (Pendent)	CP	CP
Spray (Upright)	SU	SU
Spray (Pendent)	SP	SP
Spray, recessed (Pendent)	-	RP
Flat spray (Upright)	-	FU
Flat spray (Pendent)	-	FP
Sidewall (Upright and pendent)	WUP, WU/P	WUP
Sidewall (Upright)	WU	WU
Sidewall (Pendent)	WP	WP
Sidewall (Horizontal)	WH	WH
Sidewall, recessed (Horizontal)	-	RWH, WHR
Sidewall, concealed (Horizontal)		WHSCC
Sidewall, dry (Horizontal)		DWH
Sidewall, dry, recessed (Horizontal)		RDWH
Sidewall, flush (Horizontal)	WHF	WLH
Sidewall, extended coverage (Horizontal)	WHEC	-
Conventional, dry (Upright and Pendent)	CDU/P	CDUP
Conventional, dry (Upright)	CDU	CDU
Conventional, dry (Pendent)	CDP	CDP
Spray, dry (Upright)	SDU	SDU, DSU
Spray, dry (Pendent)	SDP	SDP, DSP
Conventional, flush (Pendent)	CF	CLP
Spray, flush (Pendent)	SF	SLP
Spray, dry, flush (Pendent)	SFD	SDLP
Spray, dry, recessed (Pendent)		DRSP
Spray, concealed, dry (Pendent)		CCDSP
Spray, recessed (Pendent)	SR	SRP
Spray, concealed (Pendent)	SK	SCCP, CCP, CCSP
Early suppression fast response	ESFR	-
Early protection enhanced coverage	EPEC	-

Notes:

1. A dash (-) indicates that the type is not recognised in the standard concerned.

PART 3: SECTION 11.1

SPRINKLER HEADS

2. Concealed (CC) sprinklers are not allocated a response time category (in the listings) as there is no requirement in EN12259-1 for testing or classification. Thus, Concealed sprinklers are listed as incorporating either 5mm or 3mm bulb. No response classification should be implied or inferred from the stated bulb size.

Duyar Vana Makina Sanayi ve Ticaret A.S

Ferhatpasa Mah. 39. Sk No:16 A/3, Atasehir, Istanbul 34888, Turkey

Tel: +90 444 82 62 • Fax: +90 212 355 07 47

Website: www.duyarvana.com.tr

Head Office

Osmangazi Mh. 2653 Sk. No:7/1, Kirac-Esenyurt, Istanbul 34522, Turkey

Tel: +90 212 668 1807 • Fax: +90 212 594 7342

E-mail: recep.guler@duyarvana.com.tr • Website: www.duyarvana.com.tr

Certificate No: 1402a to EN 12259-1:1999 + A3:2006

Duyar Vana Sprinkler Heads

Product Name	Nominal Orifice Size (mm)	Type	Temperature Rating (° C)	LPCB Ref. No.
† DY-3327 (1)	15	SP	68 (5mm bulb)	1402a/01
† DY-3323 (1)	15	SU	68 (5mm bulb)	1402a/02
† DY-3329 (1)	15	WH	68 (5mm bulb)	1402a/03
† DY-3427 (1)	15	SP	68 (quick response)	1402a/04
† DY-3423 (1)	15	SU	68 (quick response)	1402a/05
† DY-3429 (1)	15	WH	68 (quick response)	1402a/06

GW Sprinkler A/S

Kastanievej 15, DK-5620 Glamsbjerg, Denmark

Tel: +45 64 72 2055 • Fax: +45 64 72 2255

E-mail: sales.dep@gwsprinkler.com

Certificate No: 084I to an LPCB Schedule of requirements

Sprinkler Heads

Product Name	Nominal Orifice Size (mm)	Type	Temperature Rating (°C)	LPCB Ref. No.
† GW-S (1)	10	SR	57, 68, 79, 93 (5mm bulb)	084I/01
	10	SP	57, 68, 79, 93, 141, 182 (5mm bulb)	
	10	SU	57, 68, 79, 93, 141, 182 (5mm bulb)	
† GW-S (1),(2),(7)	10	SR	57, 68, 79, 93 (5mm bulb)	084I/02
† GW-S (1),(7)	10	SP	57, 68, 79, 93, 141, 182 (5mm bulb)	
	10	SU	57, 68, 79, 93, 141, 182 (5mm bulb)	
† GW-S (1)	15	CU/P	57, 68, 79, 93, 141, 182 (5mm bulb)	
† GW-S (1),(2)	15	SR	57, 68, 79, 93 (5mm bulb)	
† GW-S (1)	15	SP	57, 68, 79, 93, 141, 182 (5mm bulb)	
	15	SU	57, 68, 79, 93, 141, 182 (5mm bulb)	
	15	WU/P	57, 68, 79, 93, 141, 182 (5mm bulb)	
† GW-S (1),(3)	20	CU/P	57, 68, 79, 93, 141, 182 (5mm bulb)	084I/02
	20	SP	57, 68, 79, 93, 141, 182 (5mm bulb)	
	20	SU	57, 68, 79, 93, 141, 182 (5mm bulb)	
† GW-S (1)	20	SP	57, 68, 79, 93, 141, 182 (5mm bulb)	
	20	SU	57, 68, 79, 93, 141, 182 (5mm bulb)	
	20	CU/P	57, 68, 79, 93, 141, 182 (5mm bulb)	
† GW-S QR (1),(2)	10	SR	57, 68, 79, 93, 141	084I/02
† GW-S QR (1),(4)	10	SP	57, 68, 79, 93, 141, (quick response)	
	10	SU	57, 68, 79, 93, 141, (quick response)	

PART 3: SECTION 11.1
SPRINKLER HEADS

Product Name	Nominal Orifice Size (mm)	Type	Temperature Rating (°C)	LPCB Ref. No.
† GW-S QR (1),(2),(7)	10	SR	57, 68, 79, 93, 141	
† GW-S QR (1),(4),(7)	10	SP	57, 68, 79, 93, 141, (quick response)	
	10	SU	57, 68, 79, 93, 141, (quick response)	
† GW-S QR (1),(2)	15	SR	57, 68, 79, 93, 141	
† GW-S QR (1),(4)	15	SP	57, 68, 79, 93, 141, (quick response)	
	15	SU	57, 68, 79, 93, 141, (quick response)	
	15	CU/P	57, 68, 79, 93, 141, (quick response)	
	15	WU/P	57, 68, 79, 93, 141, (quick response)	
† GW-S QR (1),(3),(4)	20	SP	57, 68, 79, 93, 141, (quick response)	
	20	CU/P	57, 68, 79, 93, 141, (quick response)	
	20	SU	57, 68, 79, 93, 141, (quick response)	
† GW-S QR (1),(4)	20	SP	57, 68, 79, 93, 141, (quick response)	
	20	SU	57, 68, 79, 93, 141, (quick response)	
	20	CU/P	57, 68, 79, 93, 141, (quick response)	

Certificate No: 084k to An LPCB Schedule of Requirements

Sprinkler Heads

Product Name	Nominal Orifice Size (mm)	Type	Temperature Ratings (°C)	LPCB Ref. No.
† GW-DD-F2 (1),(5),(6)	15	WHEC	57, 68, 79	084k/01

Johnson Controls International Plc

8902 North Interstate 27, Lubbock, Texas 79403, USA

Tel: +1 806 472 2400 • Fax: +1 806 806 8902

E-mail: bob.bandura@jci.com • Website: <https://www.johnsoncontrols.com/fire-suppression>

UK Sales Enquiries

Tel: +44 (0)161 875 0400 • Fax: +44 (0)161 875 0491

E-mail: info-uk@tyco-bspd.com • Website: www.tycobuilding.com

Certificate No: 094a to EN 12259-1:1999 + A3:2006

Certificate No: 094b to A technical approval based upon EN 12259-1:1999 + A3:2006

Certificate No: 094c to A technical approval based upon EN 12259-1:1999 (+A3:2006) & CEA4023

Sprinkler Heads

Product Name	Nominal Orifice Size (mm)	Type	Temperature Rating (°C)	LPCB Ref. No.
†TY3191	15	SU	260	094a/01
†TY3296	15	SP	260	
TY3221 (Nickel Link) (2),(3)	15	SP	74 (quick response)	094a/03
†TY3651 (1),(5)	15	CU/P	57, 68, 79, 93, 141, 182 (5mm bulb)	094a/05
†TY3351 (1)	15	WH	57, 68, 79, 93, 141, 182 (5mm bulb)	
†TY4251 (1),(5)	20	SP	57, 68, 79, 93, 141, 182, 260 (5mm bulb)	
†TY4151 (1),(5)	20	SU	57, 68, 79, 93, 141, 182, 260 (5mm bulb)	
†TY4651 (1),(5)	20	CU/P	57, 68, 79, 93, 141, 182 (5mm bulb)	
†TY3331 (1)	15	WH	57, 68, 79, 93, 141	094a/06
†TY4631 (1),(2),(5)	20	CU/P	57, 68, 79, 93, 141 (quick response)	
†TY4131 (1),(2),(5)	20	SU	57, 68, 79, 93, 141 (quick response)	
†TY4231 (1),(2),(5)	20	SP	57, 68, 79, 93, 141 (quick response)	
TY3551(4)	15	CCP	68 sprinkler with 59 ceiling plate (5mm bulb)	094a/09
	15	CCP	93 sprinkler with 74 ceiling plate (5mm bulb)	
TY3531(4)	15	CCP	68 sprinkler with 59 ceiling plate (3mm bulb)	094a/10
	15	CCP	(adjustable) 93 sprinkler with 74 ceiling plate (3mm bulb)	
TY3155 (1)(5)	15	DSU	57, 68, 79, 93, 141	094a/11
TY3255 (1)(5)	15	DSP	57, 68, 79, 93, 141	
TY3355 (1)(5)	15	DWH	57, 68, 79, 93, 141	

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SPRINKLER HEADS

Product Name	Nominal Orifice Size (mm)	Type	Temperature Rating (°C)	LPCB Ref. No.
† TY3250 (6)	15	SP	68, 93, 141, (5mm bulb)	094a/12
TY9226 / ESFR-25 (9)	N/A	SP	74, 100	094b/03
TY8223 / EFSR-22 (8)	N/A	SP	74, 100	094b/04
† ELO 231 (TY5131) (1),(7)	20	SU	68, 93, 141, (quick response)	094c/01
† ELO 231 (TY5231) (1),(7)	20	SP	68, 93, 141, (quick response)	094c/02

Notes: Dagger symbol Indicates glass bulb sprinkler head; all others are fusible element sprinkler heads.

- (1) Also approved with chromium finish
- (2) The suitability of 'quick response' sprinklers for many risks is not yet proven. Use is therefore limited to where the purchaser authority having jurisdiction and/or insurers consent to its use. Quick response sprinklers must be handled with care due to the fragile nature of the operating element, with packaging and instructions being marked accordingly.
- (3) Every five years, all sprinklers should be visually examined, and representative samples removed and tested to the requirements of the authority and/or insurer.
- (4) Certificated with Chrome, Brass and painted coverplates.
- (5) Also approved with polyester finish.
- (6) Approved in grade 316 Stainless steel
- (7) This Extra-Large Orifice (ELO) sprinkler has a k-factor of 160 l.min⁻¹.bar^{-1/2} (US k-factor of 11.2 gal.min⁻¹.psi^{-1/2}).
- (8) The ESFR-22 sprinkler has a k-factor of 320 l.min⁻¹.bar^{-1/2} (US k-factor of 22.4 gal.min⁻¹.psi^{-1/2}).
- (9) The ESFR-25 sprinkler has a k-factor of 362.9 l.min⁻¹.bar^{-1/2} (US k-factor of 25.2 gal.min⁻¹.psi^{-1/2}).

Minimax GmbH

Industriestrasse 10/12, D-23840 Bad Oldesloe, Germany

Tel: +49 4531 803 8064 • Fax: +49 4531 803 500

Website: www.minimax.de

Certificate No: 1118a to EN 12259-1

Sprinkler Heads

Product Name	SIN	Nominal Orifice size (mm)	Thread (inches)	K-Factor	Type	Temperature rating (°C)	LPCB Ref. No.
MX5-24	MX507	15	½	80	SP	57, 68, 79, 93, 141 (5mm bulb)	1118a/01
MX3	MX3021	15	½	80	SP	57, 68, 79, 93, 141 (quick response)	1118a/02
	MX3001	15	½	80	SU	57, 68, 79, 93, 141 (quick response)	
	MX3522	15	½	115	SP	57, 68, 79, 93, 141 (quick response)	
	MX3502	15	½	115	SU	57, 68, 79, 93, 141 (quick response)	
	MX3521	20	¾	115	SP	57, 68, 79, 93, 141 (quick response)	
	MX3501	20	¾	115	SU	57, 68, 79, 93, 141 (quick response)	
MX5	MX1021	15	½	80	SP	57, 68, 79, 93, 141 (5mm Bulb)	1118a/03
	MX1001	15	½	80	SU	57, 68, 79, 93, 141 (5mm Bulb)	
	MX2022	15	½	115	SP	57, 68, 79, 93, 141 (5mm Bulb)	
	MX2002	15	½	115	SU	57, 68, 79, 93, 141 (5mm Bulb)	

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SPRINKLER HEADS

Product Name	SIN	Nominal Orifice size (mm)	Thread (inches)	K-Factor	Type	Temperature rating (°C)	LPCB Ref. No.
	MX2021	20	¾	115	SP	57, 68, 79, 93, 141 (5mm Bulb)	1118a/03
	MX2001	20	¾	115	SU	57, 68, 79, 93, 141 (5mm Bulb)	1118a/03

Certificate No: 096e to EN 12259-1 + A3

Sprinkler Heads

Product Name	Nominal Orifice Size, mm	Type	Temperature rating, (°C)	LPCB Ref. No.
VK1510 (1) (2)	15	DSP	68 (5mm bulb)	096e/16
VK1550 Adjustable standard (1) (2)	15	DSP	68 (5mm bulb)	
VK1590 Adjustable recessed (1) (2)	15	RDSP	68 (5mm bulb)	

Rapidrop Global Limited

Rutland Business Park, Newark Road, Peterborough PE1 5WA, United Kingdom

Tel: +44 (0)1733 847 510 • Fax: +44 (0)1733 553 958

E-mail: rapidrop@rapidrop.com • Website: www.rapidrop.com

Certificate No: 566d to EN 12259-1:1999 + Amendment A3:2006

Sprinkler Heads

Product Name	Nominal orifice size (mm)	Type	Temperature rating (°C)	LPCB Ref. No.
† Rapidrop RD020 (1)	15	CU/P	57, 68, 79, 93, 141 (5mm bulb)	566d/01
† Rapidrop RD022 (1)	15	SP	57, 68, 79, 93, 141 (5mm bulb)	
† Rapidrop RD024 (1)	15	SU	57, 68, 79, 93, 141 (5mm bulb)	
† Rapidrop RD060 (1)	15	WH	57, 68, 79, 93, 141 (5mm bulb)	
† Rapidrop RD021 (1)	15	CU/P	57, 68, 79, 93, 141(6), (quick response)	566d/02
† Rapidrop RD023 (1)	15	SP	57, 68, 79, 93, 141(6), (quick response)	
† Rapidrop RD025 (1)	15	SU	57, 68, 79, 93, 141(6), (quick response)	
† Rapidrop RD061 (1)	15	WH	57, 68, 79, 93, 141 (quick response)	
† Rapidrop RD030(1)	15	CU/P	57, 68, 79, 93, 141, (4mm bulb)	566d/03
† Rapidrop RD031(1)	15	SP	57, 68, 79, 93, 141, (4mm bulb)	
† Rapidrop RD032(1)	15	SU	57, 68, 79, 93, 141, (4mm bulb)	
† Rapidrop RD042 (1)	20	SP	57, 68, 79, 93, 141 (5mm bulb)	566d/04
† Rapidrop RD044 (1)	20	SU	57, 68, 79, 93, 141 (5mm bulb)	
† Rapidrop RD043 (1)	20	SP	57, 68, 79, 93, 141 (quick response)	
† Rapidrop RD045 (1)	20	SU	57, 68, 79, 93, 141 (quick response)	
† Rapidrop RD052 (1)(7)	20	SP	57, 68, 79, 93, 141 (5mm bulb)	566d/05
† Rapidrop RD054 (1)(7)	20	SU	57, 68, 79, 93, 141 (5mm bulb)	
† Rapidrop RD053 (1)(7)	20	SP	57, 68, 79, 93, 141 (quick response)	
† Rapidrop RD055 (1)(7)	20	SU	57, 68, 79, 93, 141 (quick response)	
† Rapidrop RD041 (1)	20	CU/P	57, 68, 79, 93, 141 (quick response)	566d/06
† Rapidrop RD040 (1)	20	CU/P	57, 68, 79, 93, 141 (5mm bulb)	566d/07

Certificate No: 566e to EN 12259-1:1999 including amendment +A3:2006

Model RD Sprinklers

Product Name	Nominal orifice size (mm)	Type	Temperature rating (°C)	LPCB Ref. No.
Rapidrop RD101 (1)(2)(4)	15	SLP	72, 96 (quick response)	566e/01
Rapidrop RD102 (3)(4)	15	SLP	72, (quick response)	566e/02

Certificate No: 566f to EN 12259-1:1999 including amendment +A3:2006

Model RD107 Sprinkler

Product Name	Nominal orifice size (mm)	Type	Temperature rating (°C)	LPCB Ref. No.
Rapidrop RD107	15	SCCP	72 with 60 cover plate	566f/01

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SPRINKLER HEADS

Rolland Sprinklers

235 Route de la Biolle, ZA le Sauvage, Mognard 73410, France

Tel: +33 479 547 250 • Fax: +33 479 547 248

E-mail: info@rolland-sprinklers.com

Certificate No: 295a to EN 12259-1:1999 + Amendment A3:2006

Sprinkler Heads

Product Name	Nominal Orifice Size (mm)	Type	Temperature Rating (°C)	LPCB Ref. No.
† Rolland Model N (1),(2)	15	SP	57, 68, 79, 93, 141 (quick response)	295a/01
	15	SU	57, 68, 79, 93, 141 (quick response)	
	15	CU/P	57, 68, 79, 93, 141 (quick response)	
	15	SP	57, 68, 79, 93, 141, 182 (5mm bulb)	295a/02
	15	SU	57, 68, 79, 93, 141, 182 (5mm bulb)	
	15	CU/P	57, 68, 79, 93, 141, 182 (5mm bulb)	

The Reliable Automatic Sprinkler Co., Inc,

1470 Smith Grove Road, Liberty, South Carolina 29657, USA

Tel: +1 864 843 1734 • Fax: +1 864 843 1418

E-mail: jcevallos@reliablesprinkler.com • Website: www.reliablesprinkler.com

UK Sales Enquiries:

Tel: +44 (0)1372 728899 • Fax: +44 (0)1372 724461

Certificate No: 034g to LPS 1039

Certificate No: 034i to 034l to LPS 1039; 034k to an LPCB Schedule of requirements based on BS EN 12259-1: 1999 incorporating amendments 1, 2 and 3; 034l to a Technical Approval against an LPCB schedule of requirements based on LPS 1039, Issue 6, draft 7;

Certificate No: 034r to LPS 1039

Sprinkler Heads

Product Name	Nominal Orifice Size (mm)	Type	Temperature Rating (°C)	LPCB Ref. No.
Reliable F3 (19)	15	DSP	57, 68, 93, 141	034i/01
† Reliable F1 (2),(3),(4)	10	SP	57, 68, 79, 93, 141, 182 (5mm bulb)	034g/02
† Reliable F1 (5),(10)	10	SR	57, 68, 79, 93 (5mm bulb)	
† Reliable F1 (2),(3),(13)	20	CU/P	57, 68, 79, 93, 141, 182 (5mm bulb)	
	20	SU	57, 68, 79, 93, 141, 182 (5mm bulb)	
	20	SP	57, 68, 79, 93, 141, 182 (5mm bulb)	
† Reliable F1 (15),(17)	20	SR	57, 68, 79, 93 (5mm bulb)	034g/03
† Reliable F1FR (11),(13)	10	SP	57, 68, 79, 93, 141 (quick response)	
† Reliable F1FR (13),(14),(15)	10	SR	57, 68, 79, 93	
	20	SP	57, 68, 79, 93, 141 (quick response)	
† Reliable F1FR (11),(13)	20	CU/P	57, 68, 79, 93, 141 (quick response)	
	20	SU	57, 68, 79, 93, 141 (quick response)	
	20	SR	57, 68, 79, 93	
† Reliable F1FR (15),(16) * Reliable G (2)	15	CU/P	57, 74, 100, 141	034g/04
	15	SU	57, 74, 100, 141	
	15	SP	57, 74, 100, 141	
	15	WU/P	57, 74, 100, 141	
* Reliable G (6),(7),(8)	15	SR	57, 74, 100	034g/06
Reliable G3 (2)	15	SDP	and adjustable) 57, 74	
Reliable G/F (12),(9),(10)	10	SR	57, 74, 100	

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SPRINKLER HEADS

Product Name	Nominal Orifice Size (mm)	Type	Temperature Rating (°C)	LPCB Ref. No.
Reliable G4FR (8), (18)	15	SR	57, 74, 100	
	15	SK	ceiling plate) 74 with 57 ceiling plate	034g/11
Reliable F3 (19)	15	DRSP	57, 68, 93, 141	034i/01
	15	CCDSP	57 with 57 ceiling plate	
	15	CCDSP	68 with 57 ceiling plate	
	15	CCDSP	93 with 74 ceiling plate	
	15	DWH	57, 68, 93, 141	
	15	RDWH	57, 68, 93, 141	
Reliable XL Commercial (19), (23)	15	SF	74 (quick response)	034g/12
Reliable XL Commercial (20, 24)	15	WHF	74 (quick response)	
Reliable F1FR-EPEC (22)	20	SP	57, 68, 79	034i/01
Reliable ESFR-HL22	(21)	Pend.	74, 100	034k/02
Reliable JL-14	(1)	Pend.	74, 100	034r/01
Reliable JL-17	(24)	Pend.	74, 100	034r/02
† Reliable F1 56 (19)	15	SP	57, 68, 79, 93, 141, 182 (5mm bulb)	034g/13
	15	SR	57, 68, 79, 93, 141, 182 (5mm bulb)	
	15	SU	57, 68, 79, 93, 141, 182 (5mm bulb)	
	15	CU/P	57, 68, 79, 93, 141, 182 (5mm bulb)	
	15	WU/P	57, 68, 79, 93, 141, 182 (5mm bulb)	
† Reliable F1FR 56 (11), (19)	15	SP	57, 68, 79, 93, 141 (quick response)	034g/14
	15	SR	57, 68, 79, 93, 141 (3mm bulb)	
	15	SU	57, 68, 79, 93, 141(quick response)	
	15	CU/P	57, 68, 79, 93, 141(quick response)	
	15	WU/P	57, 68, 79, 93, 141(quick response)	
Reliable G5-56 (8)(25)	15	CCP	74 with 57 ceiling plate	034g/15
			100 with 74 ceiling plate	
Reliable XL Institutional (26)	15	SF	74 (quick response)	034g/16
	15	WHF	74 (quick response)	034g/17
Reliable F1-80 (19)(27)	20	SU(28), SP(29)	57, 68, 79, 93, 141 (5mm bulb)	034g/18
Reliable F1FR80 (19)(30)	20	SU(28), SP(28)	57, 68, 79, 93, 141 (quick response)	034g/19
Reliable KFR56 (19)(31)	15	SU, SP, WH	74, 100, (quick response)	034g/20
Reliable KFR80 (19)(31)	20	SU, SP	74, 100, (quick response)	034g/21
Reliable G6-56 (19)(32)	15	CCWH	74, with 57 cover plate	034g/22

Notes:

- 1) This ESFR sprinkler has a k-factor of 200 l.min⁻¹.bar² (US k-factor of 14 gal.min⁻¹.psi²).
- 2) Approved with a chromium finish.
- 3) Also approved with plated brass, black plate and dull and bright chrome finishes.
- 4) The "57°, 68°, 79° and 93° sprinklers are also approved with a white paint finish.
- 5) Incorporating Reliable F1 SP Sprinkler in Model G/F1 recessed escutcheon. To be installed in accordance with installation bulletin 119.
- 6) To be installed in accordance with installation bulletin 111G. Approved with brass, chrome or coloured recessing cup.
- 7) The Reliable G has slotted holes in the recessing cup. (The Reliable G/F1, which is similar in appearance, has no slotted holes in the recessing cup).
- 8) Not to be installed in ceilings with a positive pressure in the void above.
- 9) Incorporating Reliable G SP Sprinkler in Model G/F1 recessed escutcheon. To be installed in accordance with installation bulletin 120.
- 10) Approved with brass, chrome or white G/F1 recessed escutcheon.
- 11) The suitability of 'quick response' sprinklers for many risks is not yet proven. Use is therefore limited to where the purchaser, authority having jurisdiction and/or insurers consent to its use. Quick response sprinklers must be handled with care due to the fragile nature of the operating element, with packaging and instructions being marked accordingly.
- 12) Every five years, all sprinklers should be visually examined and presentative samples removed and tested to the requirements of the authority and/or insurer.
- 13) Approved with plated brass, bronze, chrome, black-plated and coloured finish.
- 14) Incorporating reliable F1FR SP sprinkler in Model F1 recessed escutcheon.
- 15) To be installed in accordance with specific installation instructions.
- 16) Incorporating Reliable F1FR SP sprinkler in Model F2 recessed escutcheon.
- 17) Incorporating Reliable F1 SP (5mm bulb)" sprinkler in Model F1 recessed escutcheon.
- 18) This sprinkler is approved with BeNi and Cu links.
- 19) Also approved with chrome and white paint finish.
- 20) Approved with brass, chrome, black plated and white painted finish.
- 21) This ESFR sprinkler has a k-factor of 322 l.min⁻¹.bar² (US k-factor of 22.4 gal.min⁻¹.psi^{1/2}).
- 22) This EPEC sprinkler has a k-factor of 115 l.min⁻¹.bar² (US k-factor of 8 gal.min⁻¹.psi^{1/2}).
- 23) This sprinkler must be handled with care, and the shipping cap which protects the thermal element should only be removed after installation. To be installed in accordance with Installation Bulletin 145, Rev C.
- 24) This ESFR sprinkler has a k-factor of 242 l.min⁻¹.bar^{1/2} (US k-factor of 16.8.min⁻¹.psi^{1/2}).
- 25) Can be used with solid or perforated ceiling plate (drawing 85001410).
- 26) To be installed in accordance with technical bulletin 113 Rev E
- 27) This sprinkler must be installed in accordance with Bulletin 062, November 2020

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SPRINKLER HEADS

- 28) Approved with Job & Norbulb bulbs
- 29) Approved with Job bulbs only
- 30) This sprinkler must be installed in accordance with Bulletin 063, November 2020
- 31) This sprinkler must be installed in accordance with Bulletin 036 Rev. A.
- 32) This sprinkler must be installed in accordance with Bulletin 050, November 2020

The Viking Corporation

210 N Industrial Park, Hastings, Michigan 49058, USA

Tel: +1 269 945 9501 • Fax: +1 269 945 9599

E-mail: techsvcs@vikingcorp.com • Website: www.vikingcorp.com

Certificate No: 096e to LPS 1039 or EN12259-1:1999

Sprinkler Heads

Product Name	Nominal Orifice Size (mm)	Type	Temperature Rating (°C)	LPCB Ref. No.
Viking M Microfast VK345 (1), (2), (6)	15	SU	57, 68, 79, 93, 141, (quick response)	096e/03
Viking M Microfast VK302 (1), (2), (6)	15	SP	57, 68, 79, 93, 141, (quick response)	
Viking M Microfast VK310 (1), (2), (6)	15	CU/P	57, 68, 79, 93, 141, (quick response)	
Viking M Microfast VK350 (1), (2), (6), (18)	20	SU	57, 68, 79, 93, 141, (quick response)	
Viking M Microfast VK352 (1), (2), (6), (18)	20	SP	57, 68, 79, 93, 141, (quick response)	
Viking M Microfast VK354 (1), (2), (6), (18)	20	CU/P	57, 68, 79, 93, 141, (quick response)	
Viking F-1 Microfast VK302 (3)	15	SR	57, 68, 79, 93, 141, (recessed and adjustable)	096e/04
Viking M VK118 (6),(7)	15	CU/P	57, 68, 79, 93, 141, 182 (5mm bulb)	096e/06
Viking M VK145 (6),(7)	15	SU	57, 68, 79, 93, 141, 182 (5mm bulb)	
Viking M VK102 (6),(7)	15	SP	57, 68, 79, 93, 141, 182 (5mm bulb)	
Viking M VK104 (6),(7)	15	WH	57, 68, 79, 93, 141, 182 (5mm bulb)	
Viking M VK120 (6),(7)	20	CU/P	57, 68, 79, 93, 141, 182 (5mm bulb)	
Viking M VK200 (6),(7)	20	SU	57, 68, 79, 93, 141, 182 (5mm bulb)	
Viking M VK202 (6),(7)	20	SP	57, 68, 79, 93, 141, 182 (5mm bulb)	
Viking M/E-1 VK102 (3), (14)	15	SR	57, 68, 79, 93 (5mm bulb)	
Viking M/E-1 VK202 (3), (14)	20	SR	57, 68, 79, 93 (5mm bulb)	
Viking VK130 (15), (16)	15	SU	68, 79, 93, 141, 182 (5mm bulb)	096e/09
Viking VK132 (15), (16)	15	SP	68, 79, 93, 141, 182 (5mm bulb)	
Viking Mirage Concealed VK462 (18), (19)	15	CCP	68 Sprinkler with 59 ceiling plate (3 mm bulb)	096e/12
	15	CCP	79 Sprinkler with 74 ceiling plate (3 mm bulb)	
	15	CCP	93 Sprinkler with 74 ceiling plate (3 mm bulb)	
Viking K160 VK5311 (20)	20	SU	57, 68, 79, 93, 141, (quick response)	096e/14
Viking K160 VK377 (20) (24)	20	SP	57, 68, 79, 93, 141, (quick response)	
Viking VK478 (21) (22) (23)	15	SLP	74,96 (quick response)	096e/15
Viking VK1510 (9) (25)	15	DSP	68 (5mm bulb)	096e/16
Viking VK1550 Adjustable standard (9) (25)	15	DSP	68 (5mm bulb)	
Viking VK1590 Adjustable recessed (9) (25)	15	RDSP	68 (5mm bulb)	
Viking VK4621 (26)(27)	15	CCP	68 with 59 coverplate. (3mm bulb)	096e/17
			79 with 74 coverplate. (3mm bulb)	
			93 with 74 coverplate (3mm bulb)	
Viking VK4921 (26)(28)	15	CCP	68 with 59 coverplate. (5mm bulb)	
			79 with 74 coverplate. (5mm bulb)	
			93 with 74 coverplate (5mm bulb)	

Certificate No: 096m to EN 12259-1:1999

Viking XT-1 Sprinkler Heads

Product Name	Thread size (in)	K-factor	Type	Temperature rating (°C)	LPCB Ref. No.
VK1001 (2)	½	80	SU	57, 68, 79, 93, 141 (5mm bulb)	096m/01
VK1021	½	80	SP	57, 68, 79, 93, 141 (5mm bulb)	
	½	80	SR	57, 68, 79, 93, 141 (5mm bulb)	
VK1181	½	80	CU/P	57, 68, 79, 93, 141 (5mm bulb)	
VK3001 (2)	½	80	SU	57, 68, 79, 93, 141 (quick response)	096m/02
VK3021	½	80	SP	57, 68, 79, 93, 141 (quick response)	
	½	80	SR	57, 68, 79, 93, 141 (quick response)	
VK3101	½	80	CU/P	57, 68, 79, 93, 141 (quick response)	

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SPRINKLER HEADS

Product Name	Thread size (in)	K-factor	Type	Temperature rating (°C)	LPCB Ref. No.
VK2002 (2)	½	115	SU	57, 68, 79, 93, 141 (5mm bulb)	096m/03
VK2022	½	115	SP	57, 68, 79, 93, 141 (5mm bulb)	
	½	115	SR	57, 68, 79, 93, 141 (5mm bulb)	
VK1202	½	115	CU/P	57, 68, 79, 93, 141 (5mm bulb)	096m/04
VK3502 (2)	½	115	SU	57, 68, 79, 93, 141 (quick response)	
VK3522	½	115	SP	57, 68, 79, 93, 141 (quick response)	
	½	115	SR	57, 68, 79, 93, 141 (quick response)	096m/05
VK3542	½	115	CU/P	57, 68, 79, 93, 141 (quick response)	
VK2001 (2)	¾	115	SU	57, 68, 79, 93, 141 (5mm bulb)	
VK2021	¾	115	SP	57, 68, 79, 93, 141 (5mm bulb)	096m/06
	¾	115	SR	57, 68, 79, 93, 141 (5mm bulb)	
VK1201	¾	115	CU/P	57, 68, 79, 93, 141 (5mm bulb)	
VK3501 (2)	¾	115	SU	57, 68, 79, 93, 141 (quick response)	096m/06
VK3521	¾	115	SP	57, 68, 79, 93, 141 (quick response)	
	¾	115	SR	57, 68, 79, 93, 141 (quick response)	
VK3541	¾	115	CU/P	57, 68, 79, 93, 141 (quick response)	

Tyco Fire Products Manufacturing Limited (Stockport)

Stockport Trading Estate, Yew Street, Stockport, Cheshire SK4 2JW, United Kingdom

Tel: +44 (0)161 429 3400 • Fax: +44 (0)161 477 6729

E-mail: simon.giles@tyco-bspd.com • Website: www.tfpemea.com**Sales Enquiries:**

Tel: +44 (0)161 875 0400 • Fax: +44 (0)161 875 0491

E-mail: info-uk@tyco-bspd.com • Website: www.tycobuilding.com

Certificate No: 007k to EN 12259-1:1999, A1:2001, A2:2004, A3:2006

Certificate No: 007l to A technical approval based upon EN 12259-1:1999 (A1, A2 A3 & C1)

Certificate No: 007r to EN 12259-1:1999

Certificate No: 007q to EN 12259-1:1999

Sprinkler Heads

Product Name	Nominal Orifice Size (mm)	Type	Temperature Rating (°C)	LPCB Ref. No.
† TY2208 (1)	10	SP	57, 68, 79, 93, 141, 182 (5mm bulb)	007k/03
TY2208 (1)	10	RP	57, 68, 79, 93 (5mm bulb)	
† TY2108 (1)	10	SU	57, 68, 79, 93, 141, 182 (5mm bulb)	
† TY3651 (1)	15	CU/P	57, 68, 79, 93, 141, 182 (5mm bulb)	007k/04
† TY3351 (4)	15	WH	57, 68, 79, 93, 141, 182 (5mm bulb)	
† TY4251 (1)	20	SP	57, 68, 79, 93, 141, 182 (5mm bulb)	
† TY4151 (1)	20	SU	57, 68, 79, 93, 141, 182 (5mm bulb)	007k/05
† TY4651 (1)	20	CU/P	57, 68, 79, 93, 141, 182 (5mm bulb)	
† TY4251 (1),(3)	20	RP	57, 68, 79, 93 (5mm bulb)	
TY4851 (1), (5)	20	SU	57, 68, 79, 93, 141, 182 (5mm bulb)	007k/04
TY4951 (1), (5)	20	SP	57, 68, 79, 93, 141, 182 (5mm bulb)	
† TY2209 (1), (2)	10	SP	57, 68, 79, 93, 141 (quick response)	
† TY2109 (1), (2)	10	SU	57, 68, 79, 93, 141 (quick response)	007k/05
TY2209 (1)	10	RP	57, 68, 79, 93 (3mm bulb)	
† TY3231 (1), (2)	15	SP	57, 68, 79, 93, 141 (quick response)	
† TY3231 (1), (3)	15	RP	57, 68, 79, 93 (3mm bulb)	007k/05
† TY3431 (1), (2)	15	WU/P	57, 68, 79, 93, 141 (quick response)	
† TY3331 (4)	15	WH	57, 68, 79, 93, 141	
† TY3331 (1), (3)	15	WHR	57, 68, 79, 93	007k/05
† TY4631 (1), (2)	20	CU/P	57, 68, 79, 93, 141 (quick response)	
† TY4131 (1), (2)	20	SU	57, 68, 79, 93, 141 (quick response)	
† TY4231 (1), (2)	20	SP	57, 68, 79, 93, 141 (quick response)	007k/05
† TY4631 (1), (3)	20	RP	57, 68, 79, 93 (3mm bulb)	
† TY4831 (1), (2), (5)	20	SU	57, 68, 79, 93, 141 (quick response)	
† TY4931 (1), (2), (5)	20	SP	57, 68, 79, 93, 141 (quick response)	007k/05
† TY315 (1), (15)	15mm	SU	57, 68, 79, 93, 141, 182 (5mm bulb)	
† TY325 (1), (15)	15	SP	57, 68, 79, 93, 141, 182 (5mm bulb)	
† TY313 (1), (15)	15	SU	57, 68, 79, 93, 141, (quick response)	

PART 3: SECTION 11.1

SPRINKLER HEADS

Product Name	Nominal Orifice Size (mm)	Type	Temperature Rating (°C)	LPCB Ref. No.
† TY323 (1), (15)	15mm	SP	57, 68, 79, 93, 141, (quick response)	
† TY3650 (1) (15)	15mm	CU/P	57, 68, 79, 93, 141, 182 (5mm bulb)	
† TY3630 (1) (15)	15mm	CU/P	57, 68, 79, 93, 141, (quick response)	
TY6226 / ESFR-1	(16)	Pend.	74, 100	007I/01
TY7226 / ESFR-17	(14)	Pend.	74, 100	007I/02
TY9226 / ESFR-25	(9)	Pend.	74, 100	007I/03
TY8223 / EFSR-22	(17)	Pend.	74, 100	007I/04
TY8181 (10)	15	SU	57, 68, 79, 93, 141 (quick response)	007q/01
TY8281 (10)	15	SP	57, 68, 79, 93, 141 (quick response)	
TY8681 (10)	15	CU/P	57, 68, 79, 93, 141 (quick response)	
TY8481 (10)	15	WU/P	57, 68, 79, 93, 141 (quick response)	
TY8381 (10)	15	WH	57, 68, 79, 93, 141 (quick response)	
TY9281 (10)	20	SP	57, 68, 79, 93, 141 (quick response)	
TY9181 (10)	20	SU	57, 68, 79, 93, 141 (quick response)	
TY8191 (10)	15	SU	57, 68, 79, 93, 141, 182 (5mm bulb)	007q/02
TY8291 (10)	15	SP	57, 68, 79, 93, 141, 182 (5mm bulb)	
TY8691 (10)	15	CU/P	57, 68, 79, 93, 141, 182 (5mm bulb)	
TY8491 (10)	15	WU/P	57, 68, 79, 93, 141, 182 (5mm bulb)	
TY8391 (10)	15	WH	57, 68, 79, 93, 141, 182 (5mm bulb)	
TY9291 (10)	20	SP	57, 68, 79, 93, 141, 182 (5mm bulb)	
TY1156	10	FU	57, 68, 79, 93, 141 (5mm bulb)	007r/01
TY1256	10	FP	57, 68, 79, 93, 141 (5mm bulb)	
TY3156	15	FU	57, 68, 79, 93, 141 (5mm bulb)	
TY1136 (2)	10	FU	57, 68, 79, 93, 141 (quick response)	007r/02
TY1236 (2)	10	FP	57, 68, 79, 93, 141 (quick response)	
TY3136 (2)	15	FU	57, 68, 79, 93, 141 (quick response)	
TY3236 (2)	15	FP	57, 68, 79, 93, 141 (quick response)	
TY4136 (2)	20	FU	57, 68, 79, 93, 141 (quick response)	

Notes:

- (1) Also approved with coloured and chromium finishes
- (2) The suitability of 'quick response' sprinklers for many risks is not yet proven. Use is therefore limited to where the purchaser, authority having jurisdiction and/or insurers consent to its use. Quick response sprinklers must be handled with care due to the fragile nature of the operating element, with packaging and instructions being marked accordingly
- (3) Approved with Model F700 recessed escutcheon
- (4) Also approved in chromium finish
- (5) Sprinkler has ½" NPT thread
- (6) N/A
- (7) N/A
- (8) N/A
- (9) The ESFR-25 sprinkler has a k-factor of 362.9 l.min⁻¹.bar^{-1/2} (US k-factor of 25.2 gal.min⁻¹.psi^{-1/2})
- (10) Approved in 316 Stainless Steel material
- (11) N/A
- (12) N/A
- (13) N/A
- (14) The ESFR-17 sprinkler has a k-factor of 241.9 l.min⁻¹.bar^{-1/2} (US k-factor of 16.8 gal.min⁻¹.psi^{-1/2})
- (15) Approved with 16mm long bulbs

The ESFR-1 sprinkler has a k-factor of 200 l.min⁻¹.bar^{-1/2} (US k-factor of 14 gal.min⁻¹.psi^{-1/2})

The ESFR-22 sprinkler has a k-factor of 320 l.min⁻¹.bar^{-1/2} (US k-factor of 22.4 gal.min⁻¹.psi^{-1/2}).

PART 3: SECTION 11.1
SPRINKLER HEADS

Certificate No: 007s to A technical approval based upon EN 12259-1:1999 (+A3:2006) & CEA4023

ELO 231 Sprinkler Heads

Product Name	Nominal Orifice Size (mm)	Type	Temperature Rating (° C)	LPCB Ref. No.
†ELO 231 (TY5231) (1), (2)	20	SP	68, 93, 141, (quick response)	007s/01

Victaulic Company

4901 Kesslersville Road, Easton, Pennsylvania 18040, USA

Tel: +1 610 559 3300 • Fax: +1 610 250 8817

E-mail: victaulic@victaulic.com • Website: www.victaulic.com

Certificate No: 104n to EN 12259-1:1999 including amendment +A3:2006

Globe Sprinklers

Product Name	Nominal Orifice Size (mm)	Type	Temperature Rating (°C)	LPCB Ref. No.
† Globe Model GL5668	15	CU/P	57, 68, 79, 93, 141, 182 (5mm bulb)	104n/04
† Globe Model GL5661	15	SU	57, 68, 79, 93, 141, 182 (5mm bulb)	
† Globe Model GL5651	15	SP	57, 68, 79, 93, 141, 182 (5mm bulb)	
† Globe Model GL5654	15	SR	57, 68, 79, 93, 141, 182 (5mm bulb)	
† Globe Model GL5654	15	CCP	57° with 57° cover plate, 68° with 57° or 68° cover plate, 79° with 68° cover plate, 93° with 68° cover plate (5mm bulb)	
† Globe Model GL5671	15	WH	57°, 68°, 79°, 93°, 141° (5mm bulb)	
	15	RWH	57°, 68°, 79°, 93°, 141° (5mm bulb)	
† Globe Model GL8164	20	SU	57, 68, 79, 93, 141, 182 (5mm bulb)	
† Globe Model GL8156	20	SP	57, 68, 79, 93, 141, 182 (5mm bulb)	
	20	SR	57, 68, 79, 93, 141, 182 (5mm bulb)	
† Globe Model GL5624	15	CU/P	57, 68, 79, 93, 141 (quick response)	104n/05
† Globe Model GL5615	15	SU	57, 68, 79, 93, 141 (quick response)	
† Globe Model GL5601	15	SP	57, 68, 79, 93, 141 (quick response)	
	15	SR	57, 68, 79, 93, 141 (3mm bulb)	
† Globe Model GL5604	15	CCP	57° with 57° cover plate, 68° with 57° or 68° cover plate, 79° with 68° cover plate, 93° with 68° cover plate (5mm bulb)	
† Globe Model GL5627	15	WH	57°, 68°, 79°, 93°, 141° (quick response)	
	15	RWH	57°, 68°, 79°, 93°, 141° (quick response)	
† Globe Model GL8118	20	SU	57, 68, 79, 93, 141 (quick response)	
† Globe Model GL8106	20	SP	57, 68, 79, 93, 141 (quick response)	
	20	SR	57, 68, 79, 93, 141 (3mm bulb)	
† Globe Model GL5607	15	CCP	68, (with 57 large cover plate) (3mm bulb) 79, 93, (with 68 small cover plate) (3mm bulb)	104n/06
† Globe Model GL5658	15	CCP	68, (with 57 large cover plate) (5mm bulb) 79, 93, (with 68 small cover plate) (5mm bulb)	
† Globe Model GL8169	20	CU/P	57, 68, 79, 93, 141, 182 (5mm bulb)	104n/07
† Globe Model GL8125	20	CU/P	57, 68, 79, 93, 141 (quick response)	104n/08

PART 3: SECTION 11.1

SPRINKLER HEADS

Certificate No: 104b to EN 12259-1:1999

Sprinkler Heads

Product Name	Nominal Orifice Size (mm)	Type	Temperature Rating (°C)	LPCB Ref. No.
† V2727 (1)	15	SP	57, 68, 79, 93, 141, 182 (5mm bulb)	104b/01
† V2703 (1)	15	SU	57, 68, 79, 93, 141, 182 (5mm bulb)	
† V2725 (1)	15	CU/P	57, 68, 79, 93, 141, 182 (5mm bulb)	
† V2709 (1)	15	WH	57, 68, 79, 93, 141, 182 (5mm bulb)	
† V2728 (1)	15	SP	57, 68, 79, 93, 141 (quick response)	104b/02
† V2704 (1)	15	SU	57, 68, 79, 93, 141 (quick response)	
† V2726 (1)	15	CU/P	57, 68, 79, 93, 141 (quick response)	
† V2710 (1)	15	WH	57, 68, 79, 93, 141 (quick response)	
† V3423 (1)	20	SP	57, 68, 79, 93, 141, 182 (5mm bulb)	104b/03
† V3401 (1)	20	SU	57, 68, 79, 93, 141, 182 (5mm bulb)	
† V3424 (1)	20	SP	57, 68, 79, 93, 141 (quick response)	104b/04
† V3402 (1)	20	SU	57, 68, 79, 93, 141 (quick response)	
† V3801	15	CCSP	68, with 59 ceiling plate (5mm bulb)	104b/05
			79, 93 with 74 ceiling plate (5mm bulb)	
† V3802	15	CCSP	68 with 59 ceiling plate (3mm bulb)	104b/06
			79, 93 with 74 ceiling plate (3mm bulb)	
† V8169 (2)	20	CU/P	57, 68, 79, 93, 141, 182 (5mm bulb)	104b/07
† V8125 (2)	20	CU/P	57, 68, 79, 93, 141 (quick response)	104b/08
† V2763 (1)	15	SP	57, 68, 79, 93, 141, 182 (5mm bulb)	104b/09
† V2762 (1)	15	SP	57, 68, 79, 93, 141 (quick response)	104b/10
† V3701 (3)	15	SP	57, 68, 79, 93, 141, 182 (5mm bulb)	104b/11
	15	RP	57, 68, 79, 93, 141, 182 (5mm bulb)	
† V3702 (3)	15	SP	57, 68, 79, 93, 141 (quick response)	104b/12
	15	RP	57, 68, 79, 93, 141 (quick response)	

This section lists products approved in accordance with:

- LPCB Schedule of requirements

Sprinkler Heads included in this section include a means of electronic operation in addition to the normal glass bulb mode.

Approval Conditions

- 1) LPCB approved detectors compatible with the control and indicating equipment shall be used;
- 2) Suitable electrical detection control and indicating equipment compatible with the equipment below shall be used. The control and indicating equipment shall be LPCB Approved/Certificated;
- 3) Connecting cables shall comply with BS 6387:1994 *Specification for performance requirements for cables required to maintain circuit integrity under fire conditions*, classification C,W,Z or equivalent;
- 4) The equipment must be installed, operated and maintained as prescribed in the manufacturer's Installation, Operating and Maintenance Manual;
- 5) To guard against inadvertent operation it is recommended that electrically operated sprinklers be used in conjunction with coincidence detection;
- 6) Where 'Metron' actuators are employed the maximum allowable operating temperature shall not be exceeded;
- 7) Where 'Metron' actuators are used, these shall also be LPCB approved; and
- 8) The 'Guidance' in the Part 3 Section 22 'Metron' Actuators, shall also be taken into account.

GW Sprinkler A/S

Kastanievej 15, DK-5620 Glamsbjerg, Denmark
Tel: +45 64 72 2055 • Fax: +45 64 72 2255
E-mail: sales.dep@gwsprinkler.com

Certificate No: 084h to an LPCB Schedule of requirements

Electrically Operated Sprinkler Heads

Product Name	Nominal Orifice Size (mm)	Type	Temperature Ratings (°C)	LPCB Ref. No.
GW-S-EL(1),(2),(3)	10	SP	57, 68, 79 (5mm bulb)	084h/01
	10	SU	57, 68, 79 (5mm bulb)	
GW-S-EL(1),(2),(3),(4)	10	SP	57, 68, 79 (5mm bulb)	084h/02
	10	SU	57, 68, 79 (5mm bulb)	
GW-S-EL(1),(2),(3)	15	CU/P	57, 68, 79 (5mm bulb)	
	15	SP	57, 68, 79 (5mm bulb)	
	15	SU	57, 68, 79 (5mm bulb)	
GW-S-QR-EL(1),(2),(3)	10	SP	57, 68, 79 (quick response)	
	10	SU	57, 68, 79 (quick response)	
GW-S-QR-EL(1),(2),(3),(4)	10	SP	57, 68, 79 (quick response)	
	10	SU	57, 68, 79 (quick response)	
GW-S-QR EL(1),(2),(3)	15	SP	57, 68, 79 (quick response)	
	15	SU	57, 68, 79 (quick response)	
	15	CU/P	57, 68, 79 (quick response)	

PART 3: SECTION 11.3

DUAL SENSING SPRINKLER HEADS

This section lists products approved in accordance with:

- LPCB Schedule of requirements

Dual sensing sprinkler heads have been evaluated in relation to their general performance capability but not in relation to their suitability for specific applications. The manufacturer's installation and maintenance instructions shall be followed.

Dual sensing sprinkler heads are only suitable for use on fully hydraulically calculated systems.

This section lists products approved in accordance with EN12259-14 Fixed firefighting systems - Components for sprinkler and water spray systems - Part 14: Sprinklers for Residential applications. Each entry includes the nominal orifice size in millimetres and the temperature range in degrees centigrade.

† indicates glass bulb sprinkler head; all others are fusible element sprinkler heads.
The type of sprinkler is indicated by the abbreviations as listed in Section 11.1.

Note: Sprinklers are not allocated a response time category in EN12259-14 for classification. Glass bulb concealed sprinklers are listed as incorporating either 5mm or 3mm bulb. No response classification is implied or should be inferred from the stated bulb size.

The Viking Corporation

210 N Industrial Park, Hastings, Michigan 49058, USA
Tel: +1 269 945 9501 • Fax: +1 269 945 9599
E-mail: techsvcs@vikingcorp.com • Website: www.vikingcorp.com

Certificate No: 096y to EN 12259-14:2020

Residential sprinklers

Product Name	Nominal Orifice Size (mm)	Type	Temperature rating (°C)	LPCB Ref. No.
Viking VK480 (1)	15	CCWH	74 (link)	096y/01
Viking VK494 (2) (3)	15	CCP	68, 93 (3mm bulb)	096y/02

PART 3: SECTION 12

SPRINKLER BULBS

This section lists products approved in accordance with:

- LPS 1039 *Requirements & Testing Methods for Automatic Sprinklers*
- LPS 1258 *Requirements & Testing Methods for Automatic Sprinkler Glass Bulbs with a Narrow Operating Temperature Band*
- EN 12259-1 *Fixed firefighting systems. Components for sprinkler and water spray systems.*

These bulbs may be used in sprinkler heads listed in Section 11.

Job GmbH

Kurt-Fischer-Strasse 30, D-22926 Ahrensburg, Hamburg, Germany

Tel: +49 4102 21140 • Fax: +49 4102 211470

E-mail: job@job-bulbs.com • Website: www.job-bulbs.com

Certificate No: 351a to LPS 1039: Issue 5.2 (Appropriate parts)

Product Name	Bulb Size (mm)	Temperature Rating (°C)	LPCB Ref. No.
F3 Quick Response(1)	3	57,68,79,93,141	351a/02
F3-SP 'superior' Quick Response(1)	3	57,68,79,93,141	351a/04
G5	5	57,68,79,93,141,182	351a/03

LPS 1276 Tanks

1) In accordance with the requirements of EN 12845, the following definitions are derived:

Single supply tank A water storage tank which shall be designed and protected against corrosion such that the need for emptying the tank for maintenance is reduced to a period of **not less than 3 years**

Superior supply tank A water storage tank which shall be designed and protected against corrosion such that the need for emptying the tank for maintenance is reduced to a period of **not less than 10 years**

2) Each single-supply or multi-level take-off tank supplied under this approval scheme must not exceed a maximum capacity of 1300m³. Duplicate sub-divided tanks may have a total capacity not exceeding 2600m³, provided the dividing wall is structurally capable of supporting either compartment full whilst the other is empty, and the maximum capacity of each compartment does not exceed 1300m³.

3) It may be necessary for a current Regulations Advisory Scheme, WRAS (formerly Wrc), certificate to be held by the manufacturer, specific to each tank listed.

4) Galvanised “Superior” steel tanks shall have the tank shell protected by:

(a) a coating weight of at least 610g/m² each side, with such tank entries marked ‘g’,

or

(b) an equivalent corrosion protection system which has been specifically approved and listed by the LPCB, with such tank entries marked ‘e’.

5) The purchaser shall specify the required tank designation “Superior” or “Single” in accordance with the LPC *Rules for Automatic Sprinkler Installations*, together with the tank reference number.

6) The tank must bear a plate stating:

(i) The name and address of the manufacturer.

(ii) The date of installation.

(iii) The LPCB Reference Number, including the type suffix (“Superior” or “Single”) which has been specified by the purchaser and agreed by the manufacturer.

(iv) The maximum capacity in cubic metres. Multi-supply tanks must indicate the capacity for the automatic sprinkler system separately.

Tanks which do not bear such a plate are not approved.

7) Specifiers of LPCB approved sprinkler suction tanks are advised to ensure that where a vortex inhibitor is used in accordance with the LPC Sprinkler Rules, that the vortex inhibitor used is listed in Part 3 Section 14 of the Red Book as LPCB approved.

8) Where “Superior” tank shell exteriors are not protected by 610g/m² or equivalent, appropriate inspection, service and maintenance shall be specified. Exterior shell protection of 300g/m² galvanising is set as the minimum acceptable level of exterior protection combined with specified inspection service and maintenance.

9) Immersion heaters used to prevent the ball valve and water in the vicinity from freezing shall be dual element type.

PART 3: SECTION 13.1

LPS 1276 TANKS

Balmoral Tanks Limited

Llantrisant Business Park, Llantrisant, Pontyclun CF72 8LF, United Kingdom

Tel: +44 (0)1443 235170

E-mail: watertanksales@balmoral.co.uk • Website: www.balmoraltanks.com

Certificate No: 1761a to LPS 1276: Issue 2.0

Fire Sprinkler Tank

Product Name	Description	LPCB Ref. No.
Fire Sprinkler Tank	Cylindrical Galvanised Sprinkler Tank	1761a/01

Chevalier (Building Supplies & Engineering) Ltd

22/F., Chevalier Commercial Centre, 8 Wang Hoi Road, Kowloon Bay, , Hong Kong

E-mail: jacky_leung@chevalier.com

Certificate No: 135Ab to LPS 1276

LPS 1276 Tanks

Product Name	Description	LPCB Ref. No.
Single supply tank	Contact moulded sectional GRP tank Maximum height 3m <i>Maximum capacity 1300m³</i>	135Ab/01
Superior supply tank	Contact moulded sectional GRP tank Maximum height 3m <i>Maximum capacity 1300m³</i>	135Ab/02
Single supply tank	Hot pressed moulded sectional GRP tank Maximum height 4m. <i>Maximum capacity 1300m³</i>	135Ab/03
Superior supply tank	Hot pressed moulded sectional GRP tank Maximum height 4m. <i>Maximum capacity 1300m³</i>	135Ab/04

All tank approvals are strictly subject to tanks being supplied in accordance with LPCB Approved Conditions set out in this section Introduction. The tanks shall be installed in accordance with the manufacturer's instructions.

CST Industries (UK) Limited

Unit 11A Farmwell Lane, Castlewood Business Park, South Normanton, Derbyshire DE55 2JX, United Kingdom

Tel: +44 (0)1773 522266 • Fax: +44 (0)1773 836578

E-mail: phart@cstindustries.com • Website: www.cstindustries.com

Certificate No: 044d to LPS 1276: Issue 2.0

Fire Sprinkler Tank

Product Name	Description	LPCB Ref. No.
Vulcan Storage Tank	Bolted, galvanised steel panel tank lined internally with PVC, butyl rubber or EPDM.	044d/01

Dewey Waters Limited

Tricel Weston, Winterstoke Road, Weston-Super-Mare, Somerset BS24 9AN, United Kingdom

Tel: +44 (0)1934 421477 • Fax: +44 (0)1934 421488

E-mail: sales@deweywaters.co.uk • Website: www.deweywaters.co.uk

Certificate No: 135c to LPS 1276: Issue 2.0

Sectional GRP Tanks

Product Name	Description	LPCB Ref. No.
Type T1 and T2 Tanks	Hot pressed moulded sectional GRP tanks.	135c/01

Franklin Hodge Industries Ltd.

Jubilee Building, Faraday Road, Westfields Trading Estate, Hereford HR4 9NS, United Kingdom

Tel: +44 (0)1432 269605 • Fax: +44 (0)1432 277454

E-mail: sales@franklinhodge.co.uk • Website: www.franklinhodge.com

Certificate No: 037d to LPS 1276: Issue 2.0

Fire Sprinkler Tank

Product Name	Description	LPCB Ref. No.
Firestore – Cylindrical Tank	Bolted, galvanised steel panel tank lined internally with PVC, butyl rubber or EPDM.	037d/01
Firetainer – Rectangular Tank	Bolted, galvanised steel panel tank lined internally with PVC, butyl rubber or EPDM.	037d/02

PART 3: SECTION 14

VORTEX INHIBITORS

This section lists products approved in accordance with:

- LPCB Schedule of requirements

The new edition of the LPC Sprinkler Rules, incorporating EN12845 *Fixed Firefighting Systems. Automatic Sprinkler Systems. Design, Installation and Maintenance*, includes requirements whereby the minimum dimension from the suction pipe to the minimum low water level can be reduced if a suitable vortex inhibitor is installed. Where the listed vortex inhibitors meet this requirement this is shown by a note in the listing.

Balmoral Tanks Limited

Llantrisant Business Park, Llantrisant, Pontyclun CF72 8LF, United Kingdom

Tel: +44 (0)1443 235170

E-mail: watertanksales@balmoral.co.uk • Website: www.balmoraltanks.com

Certificate No: 1761c to LPS 2070: Draft 1

Vortex Inhibitors

Product Name	Description - Inhibitors suitable for the following nominal bore suction pipes (mm):	LPCB Ref. No.
FireFlow Vortex Inhibitor	80	1761c/01
	100	1761c/02
	150	1761c/03
	200	1761c/04
	250	1761c/05
	300	1761c/06
	350	1761c/07
	400	1761c/08
	450	1761c/09

CST Industries (UK) Limited

Unit 11A Farmwell Lane, Castlewood Business Park, South Normanton, Derbyshire DE55 2JX, United Kingdom

Tel: +44 (0)1773 522266 • Fax: +44 (0)1773 836578

E-mail: phart@cstindustries.com • Website: www.cstindustries.com

Certificate No: 044b

CST Vortex Inhibitors

Certificated Products

CST Vortex Inhibitors

Inhibitors suitable for the following nominal bore suction pipes (mm):-
80, 100, 150, 200, 250, 300, 350, 400 and 450 mm

These Vortex Inhibitors have been assessed as being in compliance with the requirements of EN12845, Fixed firefighting systems - Automatic sprinkler systems - Design, installation and maintenance.

LPCB Ref. No.
044b/01

Franklin Hodge Industries Ltd.

Jubilee Building, Faraday Road, Westfields Trading Estate, Hereford HR4 9NS, United Kingdom

Tel: +44 (0)1432 269605 • Fax: +44 (0)1432 277454

E-mail: sales@franklinhodge.co.uk • Website: www.franklinhodge.com

Certificate No: 037b to EN 12845

F.H.I. Anti - Vortex Plate
Certificated Products

F.H.I. Anti - Vortex Plate

Suitable for the following nominal bore suction pipes (mm):
100, 150, 200, 250, 300, 350, 400 and 450

These Vortex Inhibitors have been assessed as being in compliance with the requirements of EN12845, Fixed firefighting systems - Automatic sprinkler systems - Design, installation and maintenance.

LPCB Ref. No.
037b/01

PART 3: SECTION 15.1

WATER FLOW ALARM SWITCHES

This section lists products approved in accordance with:

- EN12259-5 *Fixed firefighting systems. Components for sprinkler and water spray systems. Water flow detectors.*
- LPCB Schedule of requirements.

The following water flow alarm switches have been approved for use in wet pipe sprinkler systems in accordance with the *LPC Rules for Automatic Sprinkler Installations*. The products shall be installed and maintained in accordance with the manufacturer's instructions.

Applications Engineering LTD

Liberty House, Unit 9C Michael Way, Ashdown Business Park, Maresfield, Uckfield TN22 2DU, United Kingdom

Tel: +44 1825 764737

E-mail: info@appeng.co.uk • Website: <http://www.appeng.co.uk>

Certificate No: 1738a to EN 12259-5

Water flow alarm switches

Product Name	Size	Maximum Working Pressure (bar)	LPCB Ref. No.
AE-VKS25M2APENG14/JB	DN25	16	1738a/01
AE-VKS40M2APENG17/JB	DN32	16	1738a/02
AE-VKS40M2APENG18/JB	DN40	16	1738a/03

Influx Measurements Limited

1A Bennett House, The Dean, Alresford, Hampshire SO24 9BQ, United Kingdom

Tel: +44 (0)1962 736736 • Fax: +44 (0)1962 736737

E-mail: sales@influxmeasurements.com

Certificate No: 464b to EN 12259-5:2002

SprinklerSense Waterflow Switch

Product Name	Model	Sizes (mm)	Maximum Working Pressure (bar)	LPCB Ref. No.
SprinklerSense Waterflow Switch	SPDB 30	50, 65, 80, 100, 150	20	464b/01

Certificate No: 464b to EN 12259-5:2002 (with the exception of clause 4.6.1)

SprinklerSense Waterflow Switch

Product Name	Model	Sizes (mm)	Maximum Working Pressure (bar)	LPCB Ref. No.
SprinklerSense Waterflow Switch	SPDB 90	50, 65, 80, 100, 150	20	464b/03

Certificate No: 464b to EN 12259-5

SprinklerSense test interface unit

Certificated Products

SprinklerSense test interface unit

LPCB Ref. No.
464b/02

PART 3: SECTION 15.1

WATER FLOW ALARM SWITCHES

Potter Electric Signal Company LLC

1609 Park 370 Place, Hazelwood, St Louis, Missouri 63042, USA

Tel: +1 314 595 6900 • Fax: +1 314 595 6999

E-mail: info@pottersignal.com • Website: www.pottersignal.com

Certificate No: 125c to EN 12259-5 (with the exception of clause 4.6.11) of maximum 30 second alarm delay changed to 90 seconds)

VSR & VSR (EU) Water Flow Alarms

Product Name	Size	Maximum Working Pressure (bar)	LPCB Ref. No.
VSR 2"	DN 50	16	125c/01
VSR 2.5"	DN 65	16	
VSR 3"	DN 80	16	
VSR 4"	DN 100	16	
VSR 5"	DN 125	16	
VSR 6"	DN 150	16	
VSR 8"	DN 200	16	

Certificate No: 125c to EN 12259-5

Product Name	Size	Maximum Working Pressure (bar)	LPCB Ref. No.
VSR 2" (EU)	DN 50	16	125c/02
VSR 2.5" (EU)	DN 65	16	
VSR 3" (EU)	DN 80	16	
VSR 4" (EU)	DN 100	16	
VSR 6" (EU)	DN 150	16	
VSR 8" (EU)	DN 200	16	

Certificate No: 125d to EN 12259-5 (with the exception of clause 4.6.11) of maximum 30 second alarm delay changed to 90 seconds)

VSR-S & VSR-S (EU) Water flow alarms

Product Name	Size	Maximum Working Pressure (bar)	LPCB Ref. No.
VSR-S 1"	DN 25	20.7	125d/01
VSR-S 1 ¼"	DN 32	20.7	
VSR-S 1 ½"	DN 38	20.7	
VSR-S 2"	DN 50	20.7	

Certificate No: 125d to EN 12259-5

VSR-S & VSR-S (EU) Water flow alarms

Product Name	Size	Maximum Working Pressure (bar)	LPCB Ref. No.
VSR-S (EU) 1"	DN 25	20.7	125d/02
VSR-S (EU) 1 ¼"	DN 32	20.7	
VSR-S (EU) 1 ½"	DN 38	20.7	
VSR-S (EU) 2"	DN 50	20.7	

Certificate No: 125e to EN 12259-5

PART 3: SECTION 15.1

WATER FLOW ALARM SWITCHES

VSR-AT Water Flow Detectors

Product Name	Size	Maximum Working Pressure (bar)	LPCB Ref. No.
VSR-AT 2" (EU)	DN 50	16	125e/01
VSR-AT 2.5" (EU)	DN 65	16	125e/02
VSR-AT 3" (EU)	DN 80	16	125e/03
VSR-AT 4" (EU)	DN 100	16	125e/04
VSR-AT 5" (EU)	DN 125	16	125e/05
VSR-AT 6" (EU)	DN 150	16	125e/06
VSR-AT 8" (EU)	DN 200	16	125e/07

Certificate No: 125f to EN 12259-5:2002

Water flow alarm switches

Product Name	Size	Maximum Working Pressure (bar)	LPCB Ref. No.
WFD20EN	DN50	16	125f/01
WFD25EN	DN65	16	125f/02
WFD30EN	DN80	16	125f/03
WFD40EN	DN100	16	125f/04
WFD60EN	DN150	16	125f/05
WFD80EN	DN200	16	125f/06

Sika Dr. Siebert & Kuhn GmbH & Co. KG

Struthweg 7-9, Kaufungen 34260, Germany

Tel: +44 (0) 7749603461

E-mail: sales@sika-instruments.co.uk • Website: www.sika.net; www.riserteq.com

Certificate No: 1606a to EN 12259-5

Water flow alarm switches

Product Name	Size	Maximum Working Pressure (bar)	LPCB Ref. No.
VKF 25 M2 BRASS	DN 25	12	1606a/01
VKF 32 M2 BRASS	DN 32	12	1606a/02
VKF 32 M2 PLASTIC	DN 32	12	1606a/03
VKF 40 M2 BRASS	DN 40	12	1606a/04
VKF 50 M2 BRASS	DN 50	12	1606a/05

This section lists products approved in accordance with:

- LPCB Schedule of requirements

Flow switch testing devices for use under *LPC Rules for Automatic Sprinkler Installations* have been approved to a schedule of requirements developed by LPCB. The products shall be installed and maintained in accordance with the manufacturer's instructions.

Project Fire Products Limited

Pasturefields Lane Industrial Estate, Pasturefields Lane, Hixon, Staffordshire ST18 0PH, United Kingdom

Tel: +44 (0)01889 271271 • Fax: +44 (0)845 2800116

E-mail: info@projectfire.co.uk • Website: www.projectfireproducts.co.uk

Certificate No: 060a to An LPCB Schedule of Requirements

Flow switch automatic tester system

Product Name	LPCB Ref. No.
ZONECHECK	060a/01

Certificate No: 060c to An LPCB Schedule of Requirements

"Zonecheck" Flow switch testing devices

Product Name	Nominal Size (mm)	Pipe Ends	Gasket Type	Maximum Working Pressure (bar)	LPCB Ref. No.
Model ZC-R-25 (Zonecheck Residential)	25.4 x 25.4	T	EPDM	12	060c/07
Model ZC-R-32 (Zonecheck Residential)	32 x 25.4	T	EPDM	12	
Model ZC-R-40 (Zonecheck Residential)	40 x 25.4	T	EPDM	12	
Model LT-ZCL-65-002 (Zonecheck Live) (Note 2)	65 x 25.4	T	EPDM	12	060c/04
Model LT-ZCL-80-002 (Zonecheck Live) (Note 2)	80 x 25.4	T	EPDM	12	
Model LT-ZCL-100-002 (Zonecheck Live) (Note 2)	100 x 25.4	T	EPDM	12	
Model LT-ZCL-150-002 (Zonecheck Live) (Note 2)	150 x 25.4	T	EPDM	12	
Model LT-ZCL-SA-002 (Zonecheck Special) (Note 2)	65 x 25.4	T	EPDM	12	060c/05
	80 x 25.4	T	EPDM	12	
	100 x 25.4	T	EPDM	12	
	150 x 25.4	T	EPDM	12	

Sale Engineering Products Ltd.

45 Lambeth Road, Reddish, Stockport, Greater Manchester SK5 6TW, United Kingdom

Tel: +44 (0) 161 428 1180

E-mail: info@saleengineering.co.uk • Website: www.firesprinkler.co.uk

Certificate No: 1423a to A Technical Approval to an LPCB Schedule of Requirements

Sprinkler System Flow Switch Test Device

Product Name	Nominal Pipe Size (mm)	Pipe Ends	Maximum Working Pressure (bar)	LPCB Ref. No.
Zone Guardian DN50	60.3 x 60.3	T	12	1423a/01
Zone Guardian DN65	76.1 x 76.1	T	12	
Zone Guardian DN80	88.9 x 88.9	T	12	

PART 3: SECTION 15.2

FLOW SWITCH TESTING DEVICES

Product Name	Nominal Pipe Size (mm)	Pipe Ends	Maximum Working Pressure (bar)	LPCB Ref. No.
Zone Guardian DN100	114.3 x 114.3	T	12	
Zone Guardian 6"	165.1 x 165.1	T	12	
Zone Guardian DN150	168.3 x 168.3	T	12	

This section lists products approved in accordance with:

- LPCB Schedule of requirements

Wet alarm valve testing devices for use with automatic sprinkler systems have been approved to a schedule of requirements developed by LPCB. The products shall be installed and maintained in accordance with the manufacturer's instructions.

PART 3: SECTION 16.1

WATER SPRAY SYSTEMS (MEDIUM AND HIGH VELOCITY)

This section lists products approved in accordance with:

- LPCB Schedule of requirements

Medium and high velocity sprayers for use under *LPC Rules for Automatic Sprinkler Installations* on oil and flammable liquid hazards have been approved to a schedule of requirements developed by LPCB. The products shall be installed and maintained in accordance with the manufacturer's instructions.

GW Sprinkler A/S

Kastanievej 15, DK-5620 Glamsbjerg, Denmark
Tel: +45 64 72 2055 • Fax: +45 64 72 2255
E-mail: sales.dep@gwsprinkler.com

Certificate No: 084i to an LPCB Schedule of requirements

Water spray systems (high velocity)

Product Name	Description	LPCB Ref. No.
Fyrhed Waterspray System	High velocity	084i/01

Certificate No: 084i to an LPCB Schedule of requirements

Water spray systems (medium velocity)

Product Name	Description	LPCB Ref. No.
Thermospray Waterspray System	Medium velocity	084i/02

The Reliable Automatic Sprinkler Co., Inc,

1470 Smith Grove Road, Liberty, South Carolina 29657, USA

Tel: +1 864 843 1734 • Fax: +1 864 843 1418

E-mail: jcevallos@reliablesprinkler.com • Website: www.reliablesprinkler.com

UK Sales Enquiries:

Tel: +44 (0)1372 728899 • Fax: +44 (0)1372 724461

Certificate No: 034e

Approved Products

Reliable Medium Velocity
Water Spray System

**LPCB Ref.
No.**
034e/01

PART 3: SECTION 16.1

WATER SPRAY SYSTEMS (MEDIUM AND HIGH VELOCITY)

Tyco Fire and Integrated Solutions (the trading company for Tyco Fire and Integrated Solutions (UK) Limited and Tyco Fire and Integrated Solutions (Ireland) Limited)

Tyco Park, Grimshaw Lane, Newton Heath, Manchester M40 2WL, United Kingdom

Tel: +44 (0)161 205 2321 • Fax: +44 (0)161 455 4459

Website: www.tycofis.com

Certificate No: 014d to LPS 1227 DRAFT

Water spray systems (medium and high velocity)

Product Name	LPCB Ref. No.
Mulsifyre System	014d/01
Protectospray System	014d/02
Wormald High Velocity Water Spray System	014d/03
Wormald Medium Velocity Water Spray System	014d/04

PART 3: SECTION 16.2

WATER SPRAYERS

This section lists products approved in accordance with:

- LPCB Schedule of requirements

Water sprayers for use under *LPC Rules for Automatic Sprinkler Installations* on oil and flammable liquid hazards have been approved to a schedule of requirements developed by LPCB. The products shall be installed and maintained in accordance with the manufacturer's instructions.

GW Sprinkler A/S

Kastanievej 15, DK-5620 Glamsbjerg, Denmark

Tel: +45 64 72 2055 • Fax: +45 64 72 2255

E-mail: sales.dep@gwsprinkler.com

Certificate No: 084j to an LPCB Schedule of requirements

Certificated Products

GW DD (1),(2),(3) 15mm long-throw horizontal open sprinkler

**LPCB Ref.
No.
084j/01**

This section lists products approved in accordance with:

- LPS 1131 *Pumps for Automatic Sprinkler Installation. Pump Sets - Requirements and testing methods.*

Firms listed in this section shall control and be responsible for the design, construction, testing and performance of all fire pump sets incorporating their LPCB approved fire pumps.

All fire pump sets incorporating LPCB approved fire pumps shall conform to the *LPC Rules for Automatic Sprinkler Installations*, or Rules specified in the contract, and shall be tested in accordance with the LPC Sprinkler Rules.

Note: Only LPCB approved fire pumps shall be used to comply with the *LPC Rules for automatic sprinkler installations*.

Pumps are approved for a maximum working pressure of 12 bar except where stated.

Armstrong Integrated Ltd

Heywood Wharf, Mucklow Hill, Halesowen, West Midlands B62 8DJ, United Kingdom

Tel: +44 (0)8444 145 145 • Fax: +44 (08444 145 146

E-mail: ukfire@armstrongfluidtechnology.com • Website: www.armstrongfluidtechnology.com

Certificate No: 197a to LPS 1131

Fire Pump

Product Name	Type	Suction Inlet Diameter/ Discharge Outlet Diameter (mm)	Impeller Diameter (mm)	Rated Speed (rev/min)	Rated Flow (L/min) (at NPSH req.= 5.38m)	Rated Head (bar) (at NPSH req.= 5.38m)	Closed Valve Head (bar)	LPCB Ref. No.
4030 FP 8x5x11½	Direct coupled end suction	200/125	292	2900	7450	7.5	10	197a/01
			241	2900	7000	3.8	6.8	
			292	2900*	7450	7.5	10	
			292	1450*	4800	1.6	2.3	
4030FP 6x4x10	Direct coupled end suction	150/100	259*	2900	7680	5.3	8.6	197a/02
			205*	2900	5280	3.6	4.8	
			259	2900*	7680	5.3	8.6	
			259	1450*	3120	1.6	2.1	
4030 FP(1) 4x3x8½	Direct coupled end suction	100/80	224	2900	3360	3.4	6.3	197a/03
4030 FP 4x3x8½	Direct coupled end suction	80/50	175	2900	2460	1.9	3.9	197a/04
4030FP 3x2x6			157	2900	1300	1.2	2.9	
4020 FP(1) 4x3x8½	Close coupled end suction	100/80	113	2900	750	0.9	1.5	197a/05
4020 FP 8x5x11½	Close coupled end suction	200/125	224	2900	3360	3.4	6.3	197a/06
			175	2900	2460	1.9	3.9	
			292	2900	7450	7.5	10	
			241	2900	7000	3.8	6.8	
4020FP 6x4x10	Close coupled end suction	150/100	292	2900*	7450	7.5	10	197a/07
			292	1450*	4800	1.6	2.3	
			259*	2900	7680	5.3	8.6	
			205*	2900	5280	3.6	4.8	
			259	2900*	7680	5.3	8.6	
			259	1450*	3120	1.6	2.1	

PART 3: SECTION 17.1

FIRE PUMPS

Product Name	Type	Suction Inlet Diameter/ Discharge Outlet Diameter (mm)	Impeller Diameter (mm)	Rated Speed (rev/min)	Rated Flow (L/min) (at NPSH req.= 5.38m)	Rated Head (bar) (at NPSH req.= 5.38m)	Closed Valve Head (bar)	LPCB Ref. No.
4020FP 3x2x6	Close coupled end suction	80/50	157	2900	1300	1.2	2.9	197a/08
40MF 8x6x13 LPC (2),(3) & (4)	Direct Coupled End Suction	200/150	113	2900	750	0.9	1.5	197a/09
			295	2900	9050	8.1	11.1	
			279	2900	8850	7.2	9.8	
			330	2600	10430	6.8	10.7	
40MF 6x5x13 PLC(2),(3) & (4)	Direct Coupled End Suction	150/125	273	2600	9850	4.2	7.5	197a/10
			295	2900	7700	8.5	12.0	
			250	2900	7700	4.8	8.6	
			330	2600	8000	8.7	12.1	
40MF 5x4x11.5 LPC(2),(3) & (4)	Direct Coupled End Suction	125/100	250	2600	7500	3.03	6.9	197a/11
			292	2900	5750	7.9	10.9	
			241	2900	5100	4.5	7.4	
			292	2600	5850	5.4	8.8	
			241	2600	4825	3.03	5.9	

Grundfos Holding A/S

Poul Due Jensens Vej 7, Bjerringbro 8850, Denmark

Tel: +45 87 50 14 00 • Fax: +45 87 50 14 02

E-mail: info@grundfos.com • Website: www.grundfos.com

Certificate No: 510a to LPS 1131: Issue 1.2

Fire Pump

Product Name	Minimum Bypass Flow Rate (l/min)	Suction Inlet Diameter / Discharge Outlet Diameter (mm)	Impeller Diameter (mm)	Rated Speed Rev/min	Rated Flow (L/min) (at NPSH req. 5.38m)	Rated Head (bar) (at NPSH req. 5.38m)	Closed Valve Head (bar)	LPCB Ref. No.
NKF 80- 200	30	100/80	222	2950	3417	4.9	6.2	510a/01
NBF 80- 200	30	100/80	185	2950	3250	2.9	4.2	510a/02
			222		3417	4.9	6.2	
NKF 80- 250	30	100/80	185	2950	3250	2.9	4.2	510a/03
NKF 65- 160	30	80/65	227	2950	3330	5.1	6.5	510a/05
NBF 65- 160	30	80/65	177	2950	2466	2.5	4.1	510a/06
			137		2050	1.1	2.3	
NKF 65- 200	30	80/65	177	2950	2466	2.5	4.1	510a/07
			137		2050	1.1	2.3	
NBF 65- 200	30	80/65	219	2950	2633	4.3	6.3	510a/08
			180		2233	2.2	4.1	
NKF 125- 315	30	125/315	219	2950	2633	4.3	6.3	510a/09
NKF 125- 250	30	150/125	180	2990	2233	2.2	4.1	510a/09
			289.5		7233 at 5.0m	8.1	11.4	
NKF 125- 250.1	30	150/125	269	2990	6917	9.9	10.2	510a/10
			226		5.4	6.6		
			263	2990	6450	8.5	9.3	510a/11

PART 3: SECTION 17.1

FIRE PUMPS

Product Name	Minimum Bypass Flow Rate (l/min)	Suction Inlet Diameter / Discharge Outlet Diameter (mm)	Impeller Diameter (mm)	Rated Speed Rev/min	Rated Flow (L/min) (at NPSH req. 5.38m)	Rated Head (bar) (at NPSH req. 5.38m)	Closed Valve Head (bar)	LPCB Ref. No.
NKF 100-200	30	125/100	238.5 219	2990	5300	6.2 5.8	7.4 6.9	510a/12
NBF 50-125	1.67	65/50	209 144	2960	1983	3.9 1.6	6.1 2.7	510a/13
NBF 50-160	2.92	65/50	177	2960	1783	3.5	4.2	510a/14
NBF 50-200	3.62	65/50	210.5	2960	1167	4.5	5.9	510a/15

NAFFCO FZ Co

PO Box 17014, Jebel Ali, Dubai, United Arab Emirates

Tel: +971 4815111 • Fax: +971 48151222

E-mail: natfire@emirates.net.ae • Website: www.naffco.com

Certificate No: 463u to LPS 1131: Issue 1.2

Fire Pumps

Product Name	Minimum Bypass Flow Rate (l/min)	Suction Inlet Diameter / Discharge Outlet Diameter (mm)	Impeller Diameter (mm)	Rated Speed (Rev/min)	Rated Flow (L/min) (at NPSH req. 5.38m)	Rated Head (bar) (at NPSH req. 5.38m)	Closed Valve Head (bar)	Maximum Working Pressure (bar)	LPCB Ref. No.
NL-E-40-26C	9	65/40	214*	2900	1087	4.68	6.25	9.6	463u/01
	9	65/40	239*	2900	1098	6.18	7.89	9.6	
NL-E-65-26C	9	65/40	264*	2900	1155	7.24	9.65	9.6	
	23	80/65	214*	2900	1958	4.22	6.24	10.5	463u/02
NL-E-80-26C	23	80/65	239*	2900	1973	5.47	7.73	10.5	
	23	80/65	264*	2900	1979	7.82	9.52	10.5	
NL-E-100-34C	28	100/80	214*	2900	2116	4.97	6.35	10	463u/03
	28	100/80	239*	2900	2225	7.43	8.22	10	
NL-E-100-32B	28	100/80	264*	2900	2164	9.43	10.07	10	
	52	125/100	274*	2900	3085	8.05	9.28	15.5	463u/04
NL-E-100-32B	52	125/100	308*	2900	3184	10.44	11.81	15.5	
	52	125/100	342*	2900	3393	13.04	14.6	15.5	
NL-E-40-25T	34	125/100	285*	1450	2788	1.73	2.78	4.0	463u/05
	34	125/100	315*	1450	2849	2.1	3.34	4.0	
NL-E-50-25T	34	125/100	329*	1450	2882	2.58	3.71	4.0	
	15	65/40	208*	2900	1044	3.46	5.55	9.2	463u/06
NL-E-65-25T	15	65/40	234*	2900	1102	4.8	7.18	9.2	
	15	65/40	260*	2900	1135	6.18	9.25	9.2	
NL-E-100-25T	21	65/50	208*	2900	1134	4.62	5.5	9	463u/07
	21	65/50	234*	2900	1284	6.21	7.24	9	
NL-E-100-25T	21	65/50	260*	2900	1299	7.85	9.05	9	
	31	80/65	208*	2900	1776	3.47	5.31	9.9	463u/08
NL-E-100-25T	31	80/65	234*	2900	1803	5.08	7.03	9.9	
	31	80/65	260*	2900	1828	6.62	9.13	9.9	
NL-E-100-25T	60	125/100	215*	2900	2902	3.97	5.76	10.7	463u/09
	60	125/100	242*	2900	2944	5.79	7.76	10.7	
	60	125/100	269*	2900	3040	7.2	9.73	10.7	

PART 3: SECTION 17.1

FIRE PUMPS

Product Name	Minimum Bypass Flow Rate (l/min)	Suction Inlet Diameter / Discharge Outlet Diameter (mm)	Impeller Diameter (mm)	Rated Speed (Rev/min)	Rated Flow (L/min) (at NPSH req. 5.38m)	Rated Head (bar) (at NPSH req. 5.38m)	Closed Valve Head (bar)	Maximum Working Pressure (bar)	LPCB Ref. No.
NL-E-65-32B	34	80/65	280*	2900	1782	7.96	10.5	16.5	463u/10
	34	80/65	290*	2900	1815	9.19	11.2	16.5	
NL-E-80-26B	34	80/65	329*	2900	1896	13.34	15.2	16.5	463u/11
	32	100/80	235*	2900	2374	5.47	7.77	10.5	
NL-E-250-50B	32	100/80	255*	2900	2426	7.65	8.91	10.5	463u/12
	32	100/80	264*	2900	2471	7.97	9.58	10.5	
NL-E-250-50B	68	300/250	460*	1450	15216	6.56	7.06	9.4	463u/12
	68	300/250	480*	1450	16043	7.14	7.82	9.4	
	68	300/250	500*	1450	16602	7.63	8.52	9.4	

Patterson Pump Ireland Limited

Unit 1, IDA Ardmore Business & Technology Park, Marlinstown, Mullingar, Co Westmeath N91 R762, Ireland

Tel: +353 44 934 7078

E-mail: info@ie.pattersonpumps.com • Website: www.ie.pattersonpumps.com

Certificate No: 436a to LPS 1131: Issue 1.2

Long coupled end suction fire pumps

Product Name	Type	Suction Inlet Diameter / Discharge Outlet Diameter (mm)	Impeller Diameter (mm)	Rated Speed (rev/min)	Rated Flow (L/min) (at NPSH req. ≤ 5.38m)	Rated Head (bar) (at NPSH req. ≤ 5.38m)	Closed Valve Head (bar)	LPCB Ref. No.
4 x 3 VIP	Vertical in-line close coupled	100/75	216*	2950	2000	4.5	6.5	436a/01
5 x 3 VIP	Vertical in-line close coupled	125/75	178*	2950	1850	2	4.2	436a/02
			222*	2950	3300	4.2	6.8	
5 x 4 MAC	Horizontal split case	125/100	162*	2950	2700	1.3	3.3	436a/03
			219*	2950	4810	4.9	6.6	
			159*	2950	4475	1.4	3.4	
			219*	3000	4850	5.1	6.8	
			159*	3000	4400	1.6	3.6	
4 x 3 ME	Horizontal split case	100/75	219*	3300	4500	6.9	8.2	436a/04
			197*	3300	4500	4.9	6.6	
			394*	1750	3325	5.5	7.5	
5 x 4 M	Horizontal split case	125/100	270*	3300	3225	1.7	3.5	436a/05
			314*	1750	4000	3.3	4.7	
6 x 5 MAA	Horizontal split case	150/125	270*	1750	4100	1.9	3.4	436a/06
			257*	2950	5075	4.3	9	
			184*	2950	4000	1.5	4.7	
			257*	3000	5050	4.3	9.3	
			184*	3000	4100	1.5	4.9	
8 x 6 MI	Horizontal split case	200/150	257*	3300	5150	6.7	11.2	436a/07
			206*	3300	5000	2.5	7.2	
			406*	1750	9400	5.6	8.1	
			327*	1750	8775	2.1	5.1	
			406*	2100	9100	9.4	11.5	
			338*	2100	10100	4.5	7.9	

PART 3: SECTION 17.1

FIRE PUMPS

Product Name	Type	Suction Inlet Diameter/ Discharge Outlet Diameter (mm)	Impeller Diameter (mm)	Rated Speed (rev/min)	Rated Flow (L/min) (at NPSH req. ≤ 5.38m)	Rated Head (bar) (at NPSH req. ≤ 5.38m)	Closed Valve Head (bar)	LPCB Ref. No.
10 x 8 M	Horizontal split case	250/200	457*	1470	13000	5.4	7.4	436a/08
			400*	1470	12300	2.7	5.6	
			457*	1750	13200	8.6	10.5	
5x4x10 VES	End suction long coupled	125/100	356	1750	11000	3.6	6.1	436a/09
			259*	2950	4900	7.9	9.3	
			215*	2950	4800	3.5	5.9	
			259*	2800	4950	7.1	8.3	
			215*	2800	4750	2.9	5.3	
			259*	2600	4750	5.7	7.2	
			215*	2600	4550	2.3	4.6	
			259*	2400	4350	5	6.1	
			215*	2400	4000	2.3	3.9	
			259*	2200	4550	3.9	5.1	
5x3x13 VES (2)	End suction long coupled	125/75	318.5*	2950	4000	10	13.3(1)	436a/010
			215*	2200	3800	1.7	3.3	
			260*	2950	3675	4.5	8.7	
			318.5*	2800	3950	8.7	12.0(1)	
			260*	2800	3530	3.9	7.9	
			318.5*	2600	3900	7	10.3(1)	
			260*	2600	3350	3	6.8	
			318.5*	2400	3475	6.2	8.8	
			260*	2400	3075	3	5.5	
			318.5*	2200	3640	4.2	7.4	
6x5x11 VES (3)	End suction long coupled	150/125	260*	2200	2900	2.3	4.9	436a/011
			290*	2900	6600	9.6	10.7(1)	
			250*	2900	6300	5.9	7.8	
			290*	2800	6500	8.8	9.9	
			250*	2800	6500	5.3	7.3	
			310*	2600	6550	8.8	9.9	
			250*	2600	6700	3.9	6.2	
			330*	2400	6050	9.4	10.0(1)	
			250*	2400	6000	3.6	5.3	
			330*	2200	5900	7.7	8.5	
10x8x17SSC (4)	Horizontal split case	250/200	250*	2200	6150	2.5	4.4	436a/012
			406*	2100	12200	8.9	12.2(1)	
			349*	2100	12200	5.3	9.1	
			422*	1750	12200	6.7	9.3	
			349*	1750	11800	2.6	6.3	
			422*	1475	12800	3.2	6.6	
			349*	1475	9900	2	4.5	
			422*	1750)*	12200	6.7	9.3	
			349	1475*	9900	2	4.5	
			250*	2200	6150	2.5	4.4	
8x6YR (3)	Horizontal split case	200/150	300	2950	7700	8.2	12.1(1)	436a/13
			263	2950	7675	4.9	9.5	
8x6YS (3)			384	2100	12500	8	11.0(1)	436a/014
			340	2100	11500	5.2	8.5	

SPP Pumps Limited

Crucible Close, Mushet Industrial Park, Coleford, Gloucestershire GL16 8PS, United Kingdom

Tel: +44 (0)1594 832 701 • Fax: +44 (0)1594 836 300

E-mail: enquiries@sppumps.com • Website: www.sppumps.com

Certificate No: 111b to LPS 1131

PART 3: SECTION 17.1

FIRE PUMPS

Fire Pump

Product Name	Type	Suction Inlet Diameter/ Discharge Outlet Diameter (mm)	Impeller Diameter (mm)	Rated Speed (rev/min)	Rated Flow (L/min) (at NPSH req. = 5.38m)	Rated Head (bar) (at NPSH req. = 5.38m)	Closed Valve Head (bar)	LPCB Ref. No.
TD20D Thru-stream (2),(5)	Horizontal split case	250/200	340	2950	13600	10.8	15.7 ⁽¹⁾	111b/01
			275*	2950	12000	7.6	10.3 ⁽¹⁾	
			273*	2950	11600	7.4	10	
			245*	2950	8500	6	8	
			340	2950*	13600	10.8	15.7 ⁽¹⁾	
			340	2400*	13500	6	10.3 ⁽¹⁾	
TD20E Thru-stream (2),(5)	Horizontal split case	250/200	290*	2950	13300	6.7	11.3 ⁽¹⁾	111b/02
			273*	2950	13300	5.7	10	
			240*	2950	10800	4.9	7.7	
			290	2950*	13300	6.7	11.3 ⁽¹⁾	
			290	2800*	13800	5.3	10.2	
			290	2200*	12700	2	6.3	
TD15F Thru-stream (3),(5)	Horizontal split case	200/150	325*	2950	9600	7.9	13.3 ⁽¹⁾	111b/03
			282*	2950	9600	5.4	10	
			275*	2950	9600	5.1	9.5	
			245*	2950	9600	3.9	7.5	
			325	2950*	9600	7.9	13.3 ⁽¹⁾	
			325	2550*	9600	5	10	
TD15A Thru-stream (3),(5)	Horizontal split case	200/150	325*	2950	7300	12.8	14.4 ⁽¹⁾	111b/04
			270*	2950	7300	8.5	9.9	
			240*	2950	7300	5.9	7.7	
			270	2950*	7300	8.5	9.8	
			270	2400*	8650	4.3	6.4	
			325	2950*	7300	12.8	14.4 ⁽¹⁾	
KP12X Unistream (5)	Direct coupled end suction	150/125	264*	2950	6800	8.5	10.4 ⁽¹⁾	111b/05
			200*	2950	6650	2.4	5.4	
			264	2950*	6800	8.5	10.4 ⁽¹⁾	
			264	2200*	5700	4.7	5.8	
			264	2950	5500	7.6	9.8	
			195*	2950	4200	3.6	5.3	
KP10X Unistream (5)	Direct coupled end suction	125/100	264*	2950	5500	7.6	9.8	111b/06
			264	2950*	5500	7.6	9.8	
			264	2200*	5500	3	5.7	
			272*	2950	7800	7.8	9.8	
			239*	2950	7600	5.2	7.7	
			272	2950*	7800	7.8	9.8	
KP15Y Unistream (5)	Direct coupled end suction	200/150	272*	2950	7800	7.8	9.8	111b/07
			272	2200*	8200	3.2	5.6	
			310*	2600	8600	8.6	10.5	
			239*	2600	7800	3.2	5.9	
			310	2600*	8600	8.6	10.5	
			310	2000*	7350	4.7	6.2	
KP08Y Unistream (4),(5)	Direct coupled end suction	100/80	329*	2950	3600	13.2	15.2 ⁽¹⁾	111b/08
			270*	2950	3500	7	10	
			255*	2950	3450	5.6	8.8	
			329	2950*	3600	13.2	15.2 ⁽¹⁾	
			329	2400*	3650	7	10	
			329	2200*	3650	5	8.3	
KP08V Unistream (5)	Direct coupled end suction	100/80	214	2920	2700	2.4	5.6	111b/09
			165	2920	2340	1.6	3.3	
KP06C Unistream (5)	Direct coupled end suction	80/65	174	2900	2590	2.3	4.3	111b/10
			125	2900	1790	0.6	2	
KP05D Unistream (5)	Direct coupled end suction	65/50	214	2900	1380	3.3	6.3	111b/11
			125	2900	1380	0.6	2	

PART 3: SECTION 17.1

FIRE PUMPS

Product Name	Type	Suction Inlet Diameter/ Discharge Outlet Diameter (mm)	Impeller Diameter (mm)	Rated Speed (rev/min)	Rated Flow (L/min) (at NPSH req. = 5.38m)	Rated Head (bar) (at NPSH req. = 5.38m)	Closed Valve Head (bar)	LPCB Ref. No.
KP06D Unistream (5)	Direct coupled end suction	80/65	165	2900	1090	1.6	3.7	111b/12
			214*	2950	2580	5	6.6	
			165*	2950	2250	2.3	3.8	
KP08D Unistream (5)	Direct coupled end suction	100/80	214	2950*	2580	5	6.6	111b/13
			214	2200*	2550	1.7	3.6	
			214*	2950	3400	4.8	6.5	
KM10E Eurostream(5)	Close coupled end suction	125/100	165	2950	2820	2.4	3.8	111b/14
			214	2950*	3400	4.8	6.5	
			214	2200*	3300	1.8	3.7	
KM08V Eurostream(5)	Close coupled end suction	100/80	264	2950	5500	7.6	9.8	111b/15
			195	2950	4200	3.6	5.3	
KM06C Eurostream (5)	Close coupled end suction	80/65	214	2920	2700	2.4	5.6	111b/16
			174	2900	2590	2.3	4.3	
KM05D Eurostream (5)	Close coupled end suction	65/50	165	2920	2340	1.6	3.3	111b/17
			174	2900	2590	2.3	4.3	
KM06D Eurostream (5)	Close coupled end suction	80/65	125	2900	1790	0.6	2	111b/17
			214	2900	1380	3.3	6.3	
KM06D Eurostream (5)	Close coupled end suction	80/65	165	2900	1090	1.6	3.7	111b/18
			214	2950	2580	5	6.6	
KM08D Eurostream (5)	Close coupled end suction	100/80	165	2950	2250	2.3	3.8	111b/19
			214	2950	3400	4.8	6.5	
AV03N Unistream (5)	Close coupled end suction	100/80	165	2950	2820	2.4	3.8	111b/20
			174	2900	2540	1.3	3.8	
AV03P Eurostream (5)	Close coupled end suction	100/80	135	2900	1840	1	2.3	111b/21
			174	2900	2540	1.3	3.8	
KP10Y Unistream (5)	Direct coupled end suction	150/100	135	2900	1840	1	2.3	111b/23
			264*	2950	7680	5.2	9.7	
			210*	2950	5100	4.2	6	
KM08E Eurostream (5)	Close coupled end suction	100/80	264	2950*	7680	5.2	9.7	111b/24
			264	2200*	6480	2	5.4	
			264*	2950	2800	9.5	10	
KP08E Unistream (5)	Direct coupled end suction	100/80	205*	2950	2800	4.2	5.9	111b/25
			264*	2950	2800	9.5	10	
			205*	2950	2800	4.2	5.9	
KP12Z Unistream (5),(6)	Direct coupled end suction	150/125	264*	2600	3150	6.6	7.8	111b/26
			205*	2600	2750	2.8	4.6	
			264	2950*	2800	9.5	10	
			264	2200*	3200	3.8	5.5	
			329*	2600	6500	10.6	12.1	
			255*	2600	6000	5	6.9	
KP15Y Unistream (5)	Direct coupled end suction	200/150	329	2600*	6500	10.6	12.1	111b/27
			329	2000*	6350	5.4	7.1	
			272*	2950	7800	7.8	9.8	
			239*	2950	7600	5.2	7.7	
			272	2950*	7800	7.8	9.8	
			272	2200*	8200	3.2	5.6	
TF20A Thru- stream (6)	Horizontal split case	250/200	310*	2600	8600	8.6	10.5	111b/29
			239*	2600	7800	3.2	5.9	
			310	2600*	8600	8.6	10.5	
			310	2000*	7350	4.7	6.2	
			480	1760	13170 at 5.0m	10.8	12.0	
			310	2000*	7350	4.7	6.2	

PART 3: SECTION 17.1

FIRE PUMPS

Product Name	Type	Suction Inlet Diameter/ Discharge Outlet Diameter (mm)	Impeller Diameter (mm)	Rated Speed (rev/min)	Rated Flow (L/min) (at NPSH req. = 5.38m)	Rated Head (bar) (at NPSH req. = 5.38m)	Closed Valve Head (bar)	LPCB Ref. No.
			480	1760	13540 at 5.38m	10.7	12.0	
			370	1760	12540 at 5.0m	5.7	7.3	
			370	1760	12900 at 5.38m	5.6	7.3	

This section lists products approved in accordance with:

- LPS 1131 *Pumps for Automatic Sprinkler Installation. Pump Sets - Requirements and testing methods.*

Firms listed in this section shall control and be responsible for the design, construction, testing and performance of all fire pump sets incorporating their LPCB approved fire pumps.

All fire pump sets incorporating LPCB approved fire pumps shall conform to the *LPC Rules for Automatic Sprinkler Installations*, or Rules specified in the contract, and shall be tested in accordance with the LPC Sprinkler Rules.

Only LPCB approved fire pumps shall be used to comply with the *LPC Rules for Automatic Sprinkler Installations*.

Pumps listed in this section are suitable for use in pump sets for high-rise and multi-storey buildings.

SPP Pumps Limited

Crucible Close, Mushet Industrial Park, Coleford, Gloucestershire GL16 8PS, United Kingdom

Tel: +44 (0)1594 832 701 • Fax: +44 (0)1594 836 300

E-mail: enquiries@spppumps.com • Website: www.spppumps.com

Certificate No: 111b to LPS 1131: Issue 1.2

Product Name	Suction Inlet Diameter/ Discharge Outlet Diameter (mm)	Delivery Configuration	Impeller Diameter (mm)	Rated Speed (rev/min)	Rated Flow (l/min) (at NPSH req. <= 5.38m)	Rated Head (bar) (at NPSH req. <= 5.38m)	Closed Valve Head (bar)	LPCB Ref. No.
CD10K 2-5 stage Multistream multistage pump	125/100	(1) Single stage - closed stage or final outlet	219	2950	2800	4.8	7.0	111b/22
			202	2950	2800	3.3	5.5	
		(2) Single stage - intermediate outlet	219	2950	2800	3.7	7.5	
			202	2950	2800	1.4	5.9	
		(3) Final outlet of five stage pump	219	2950	2800	24.0	35.0	
			202	2950	2800	16.5	27.5	

Certificate No: 111b to LPS 1131: Issue 1.2

CD12K 2-10 stage Multistream multistage pump

Product Name	Suction Inlet Diameter/ Discharge Outlet diameter (mm)	Delivery Configuration	Impeller Diameter (mm)	Rated Speed (rev/min)	Rated Flow* (L/min) (at NPSH req <= 5.38m)	Rated Head (bar) (at NPSH req <= 5.38m)	Closed Valve Head (bar)	LPCB Ref. No.
CD12K 2-10 stage Multistream multistage pump	150/125	Single stage - closed stage or final outlet	308	1470	4290	2.3	3.7	111b/28
			247	1470	3930	0.5	2.2	
		Single stage - intermediate outlet	308	1470	4290	0.8	3.7	
			247	1470	3930		2.2	

PART 3: SECTION 17.2

MULTI-STAGE FIRE PUMPS

Product Name	Suction Inlet Diameter/ Discharge Outlet diameter (mm)	Delivery Configuration	Impeller Diameter (mm)	Rated Speed (rev/min)	Rated Flow* (L/min) (at NPSH req <= 5.38m)	Rated Head (bar) (at NSPH req <= 5.38m)	Closed Valve Head (bar)	LPCB Ref. No.
		Final outlet of ten stage pump	308	1470	4290	23.0	37.0	
			247	1470	3930	5.0	22.0	

This section lists products approved in accordance with:

- LPS 1239 *Requirements for LPCB Approval of Diesel Engines for Sprinkler Pump Sets.*

LPCB approved diesel engines shall be used in fire pump sets which conform to the *LPC Rules for Automatic Sprinkler Installations.*

For pump sets requiring a diesel engine with a power/speed rating outside the range of approved diesel engines listed, such diesel engines should conform to LPS 1239, Issue 1.

LPCB Approved engines are approved for use between the following limits:

- Not greater than the approved rated engine power at the rated speed.
- Not less than 40% of the approved rated engine power at the rated speed

The responsibility for the design, construction, testing and performance of all fire pump sets incorporating LPCB approved diesel engines lies with the pump set manufacturer.

Clarke UK Limited

Grange Works, Lomond Road, Coatbridge, Scotland ML5 2NN, United Kingdom
Tel: +44 (0)1236 429946 • Fax: +44 (0)1236 427274

Certificate No: 601b to LPS 1239

Diesel Engines for sprinkler pump sets

Product Name	1760*	2100*	2350*	2600*	2800*	2960*	LPCB Ref. No.
JU4H - LP20 (1)	60	67	72	-	-	-	601b/01
JU4H - LP24 (1)	-	-	72	75	80	83	601b/02
JU4H - LP50 (2)	110	130	127	-	-	-	601b/03
JU4H - LP54 (2)	-	-	122	139	145	145	601b/04
JU4H - LPL4 (2)	-	-	-	123	130	135	601b/10
JU4H - LP84 (3)	-	-	139	175	179	185	601b/05
JU6H - LP50 (2)	183	210	210	-	-	-	601b/06
JU6H - LP54 (2) **	-	-	210	216	216	216	601b/07
JU6H - LP60 (3)	200	240	240	-	-	-	601b/08
JU6H - LP84 (3) **	-	-	243	247	259	275	601b/09

Certificate No: 601c to LPS 1239

Diesel Engines for sprinkler pump sets

Product Name	2800*	2960*	LPCB Ref. No.
LC2A - LP30	6.8	9.7	601c/01
LC2A - LP60	22.1	22.5	601C/02

PART 3: SECTION 18

PIPEWORK SUPPORTS

This section lists products approved in accordance with:

- LPS 1194 *Requirements and Testing Methods for Pipe Hangers.*

Components of pipe support systems listed below are considered acceptable for use in installations conforming to the *LPC Rules for Automatic Sprinkler Installations*. The products shall be installed and maintained in accordance with the manufacturer's instructions.

Exco Industries Ltd

Piksa House, 2 Penrod Way, Heysham, Lancashire LA3 2UZ, United Kingdom

Tel: +44(0)1524 388822 • Fax: +44 (0)1524 388877

E-mail: info@exco-industries.co.uk • Website: www.excoindustries.co.uk

Certificate No: 1568a to LPS 1194: Issue 1.2

Pipe Hangers

Product Name	Pipe Size (DN)	Material	Finish	LPCB Ref. No.
FIL015LPCB	15	Mild Steel	Galvanised	1568a/01
FIL020LPCB	20	Mild Steel	Galvanised	1568a/02
FIL025LPCB	25	Mild Steel	Galvanised	1568a/03
FIL032LPCB	32	Mild Steel	Galvanised	1568a/04
FIL040LPCB	40	Mild Steel	Galvanised	1568a/05
FIL050LPCB	50	Mild Steel	Galvanised	1568a/06
FIL065LPCB	65	Mild Steel	Galvanised	1568a/07
FIL080LPCB	80	Mild Steel	Galvanised	1568a/08
FIL100LPCB	100	Mild Steel	Galvanised	1568a/09
FIL125LPCB	125	Mild Steel	Galvanised	1568a/10
FIL150LPCB	150	Mild Steel	Galvanised	1568a/11

WOPF Befestigungselemente GmbH

Luner Rennbahn 22, D-21339 Luneburg, Germany

Website: www.kwikstrut.com

Certificate No: 918a to LPS 1194: Issue 1.2

'KWIKSTRUT' Filbow Pipe Hangers

Product Name	Pipe Size (mm)	Material	Finish	LPCB Ref. No.
FIL00272	20	Mild Steel	Galvanised	918a/01
FIL00342	25	Mild Steel	Galvanised	
FIL00422	32	Mild Steel	Galvanised	
FIL00482	40	Mild Steel	Galvanised	
FIL00602	50	Mild Steel	Galvanised	
FIL00762	65	Mild Steel	Galvanised	
FIL00892	80	Mild Steel	Galvanised	
FIL01142	100	Mild Steel	Galvanised	
FIL01682	150	Mild Steel	Galvanised	
FIL02192	200	Mild Steel	Galvanised	

This section lists products approved in accordance with:

- LPS 1186 *Requirements and testing methods for check valves.*

Check valves listed in this section are considered acceptable for use in installations conforming to the *LPC Rules for Automatic Sprinkler Installations*. The products shall be installed and maintained in accordance with the manufacturer's instructions.

Jinan Mech Valve Technology Co Ltd

No.2, Meide Street Meigui Town, Pingyin County, Jinan City, Shandong Province 250400, China

Tel: (86)531 87885013

E-mail: info@meide-casting.com • Website: <http://www.meide-casting.com>

Certificate No: 988b to LPS 1186 Issue 3.1

Check Valves

Product Name	Nominal Size (mm)	Pipe Outside Diameter (mm)	Body Material	Maximum Working Pressure (bar)	Connections	LPCB Ref. No.
H84X check valves	50	60.3	Ductile iron	25	Grooved	988b/01
	65	73.0	Ductile iron	25	Grooved	
	65	76.1	Ductile iron	25	Grooved	
	80	88.9	Ductile iron	25	Grooved	
	100	114.3	Ductile iron	25	Grooved	
	125	139.7	Ductile iron	25	Grooved	
	125	141.3	Ductile iron	25	Grooved	
	150	165.1	Ductile iron	25	Grooved	
	150	168.3	Ductile iron	25	Grooved	
	200	219.3	Ductile iron	25	Grooved	
	250	273.0	Ductile iron	25	Grooved	
	300	323.9	Ductile iron	25	Grooved	
	H44X2 check valves	50	60.3	Ductile iron	25	
65		73	Ductile iron	25	Flanged	
80		88.9	Ductile iron	25	Flanged	
100		114.3	Ductile iron	25	Flanged	
125		139.7	Ductile iron	25	Flanged	
150		165.1	Ductile iron	25	Flanged	
200		219.1	Ductile iron	25	Flanged	
250		273.0	Ductile iron	25	Flanged	
300		323.9	Ductile iron	25	Flanged	

Rapidrop Global Limited

Rutland Business Park, Newark Road, Peterborough PE1 5WA, United Kingdom

Tel: +44 (0)1733 847 510 • Fax: +44 (0)1733 553 958

E-mail: rapidrop@rapidrop.com • Website: www.rapidrop.com

Certificate No: 566j to LPS 1186 Issue 3.1

RAPIDROP Check Valves

Product Name	Nominal Size (mm)	Pipe Outside Diameter (mm)	Body Material	Maximum Working Pressure (bar)	Connections	LPCB Ref. No.
Fig 301	50	60.3	Ductile iron	25	Grooved	566j/01
	65	73.0	Ductile iron	25	Grooved	
	65	76.1	Ductile iron	25	Grooved	
	80	88.9	Ductile iron	25	Grooved	
	100	114.3	Ductile iron	25	Grooved	
	125	139.7	Ductile iron	25	Grooved	

PART 3: SECTION 19

CHECK VALVES

Product Name	Nominal Size (mm)	Pipe Outside Diameter (mm)	Body Material	Maximum Working Pressure (bar)	Connections	LPCB Ref. No.
Fig 302	125	141.3	Ductile iron	25	Grooved	566j/02
	150	165.1	Ductile iron	25	Grooved	
	150	168.3	Ductile iron	25	Grooved	
	200	219.3	Ductile iron	25	Grooved	
	250	273.0	Ductile iron	25	Grooved	
	300	323.9	Ductile iron	25	Grooved	
	50	60.3	Ductile iron	25	Flanged	
	65	73	Ductile iron	25	Flanged	
	80	88.9	Ductile iron	25	Flanged	
	100	114.3	Ductile iron	25	Flanged	
	150	165.1	Ductile iron	25	Flanged	
	200	219.1	Ductile iron	25	Flanged	
	250	273.0	Ductile iron	25	Flanged	
	300	323.9	Ductile iron	25	Flanged	

The Viking Corporation

210 N Industrial Park, Hastings, Michigan 49058, USA

Tel: +1 269 945 9501 • Fax: +1 269 945 9599

E-mail: techsvcs@vikingcorp.com • Website: www.vikingcorp.com

Certificate No: 096j to LPS 1186 Issue 3.1

FIREKING Check Valves

Product Name	Nominal Size (mm)	Pipe Outside Diameter (mm)	Body Material	Maximum Working Pressure (bar)	Connections	LPCB Ref. No.		
SCG	50	60.3	Ductile iron	25	Grooved	096j/01		
	65	73.0	Ductile iron	25	Grooved			
	65	76.1	Ductile iron	25	Grooved			
	80	88.9	Ductile iron	25	Grooved			
	100	114.3	Ductile iron	25	Grooved			
	125	139.7	Ductile iron	25	Grooved			
	125	141.3	Ductile iron	25	Grooved			
	150	165.1	Ductile iron	25	Grooved			
	150	168.3	Ductile iron	25	Grooved			
	200	219.3	Ductile iron	25	Grooved			
	250	273.0	Ductile iron	25	Grooved			
	300	323.9	Ductile iron	25	Grooved			
	SCF	50	60.3	Ductile iron	25		Flanged	096j/02
		65	73	Ductile iron	25		Flanged	
		80	88.9	Ductile iron	25		Flanged	
100		114.3	Ductile iron	25	Flanged			
125		139.7	Ductile iron	25	Flanged			
150		165.1	Ductile iron	25	Flanged			
200		219.1	Ductile iron	25	Flanged			
250		273.0	Ductile iron	25	Flanged			
300		323.9	Ductile iron	25	Flanged			

Victaulic Company

4901 Kesslersville Road, Easton, Pennsylvania 18040, USA

Tel: +1 610 559 3300 • Fax: +1 610 250 8817

E-mail: victaulic@victaulic.com • Website: www.victaulic.com

Certificate No: 104h to LPS 1186 Issue 3.1

PART 3: SECTION 19

CHECK VALVES

Series 717 Check Valves

Product Name	Nominal Size (mm)	Pipe Outside Diameter (mm)	Body Material	Maximum Working Pressure (bar)	Connections	LPCB Ref. No.
Series 717 R check valves	50	60.3	Ductile iron	25	Grooved	104h/02
	65	76.1	Ductile iron	25	Grooved	
	80	88.9	Ductile iron	25	Grooved	
	100	114.3	Ductile iron	25	Grooved	
	125	139.7	Ductile iron	25	Grooved	
		141.3	Ductile iron	25	Grooved	
	150	165.1	Ductile iron	25	Grooved	
		168.3	Ductile iron	25	Grooved	
	200	219.3	Ductile iron	24	Grooved	
	250	273.0	Ductile iron	17	Grooved	
Series 717 H check-valves	300	323.9	Ductile iron	17	Grooved	104h/01
	50	60.3	Ductile iron	25	Grooved	
	65	73	Ductile iron	25	Grooved	
Series 717 check-valves	80	88.9	Ductile iron	25	Grooved	
	100	114.3	Ductile iron	25	Grooved	
	125	139.7	Ductile iron	25	Grooved	
		141.3	Ductile iron	25	Grooved	
	150	165.1	Ductile iron	25	Grooved	
		168.3	Ductile iron	25	Grooved	
	200	219.1	Ductile iron	24	Grooved	
	250	273.0	Ductile iron	17	Grooved	
	300	323.9	Ductile iron	17	Grooved	

PART 3: SECTION 20

STOP VALVES

This section lists products approved in accordance with:

- LPS 1185 - *Requirements for Testing Methods for Remote Monitored Gear Operated Butterfly Stop Valves.*
- LPS 2083 - *Automatic Water Level Control Valves for use in Sprinkler Suction Tanks.*

Stop valves listed below are considered acceptable for use in installations conforming to the *LPC Rules for Automatic Sprinkler Installations*. The products shall be installed and maintained in accordance with the manufacturer's instructions.

Jinan Mech Valve Technology Co Ltd

No.2, Meide Street Meigui Town, Pingyin County, Jinan City, Shandong Province 250400, China

Tel: (86)531 87885013

E-mail: info@meide-casting.com • Website: <http://www.meide-casting.com>

Certificate No: 988c to LPS 1185 Issue 3.2

Butterfly Valves

Product Name	Nominal size (DN)	Pipe Outside Diameter (mm)	Body and Disc Material	Maximum Working Pressure (bar)	End Connections	LPCB Ref. No.		
D381X	50	60.3	ASTM A536 disc with EPDM coat	16	Grooved x Grooved	988c/01		
	65	73.0	ASTM A536 disc with EPDM coat	16	Grooved x Grooved			
	65	76.1	ASTM A536 disc with EPDM coat	16	Grooved x Grooved			
	80	88.9	ASTM A536 disc with EPDM coat	16	Grooved x Grooved			
	100	114.3	ASTM A536 disc with EPDM coat	16	Grooved x Grooved			
	125	139.7	ASTM A536 disc with EPDM coat	16	Grooved x Grooved			
	125	141.3	ASTM A536 disc with EPDM coat	16	Grooved x Grooved			
	150	165.1	ASTM A536 disc with EPDM coat	16	Grooved x Grooved			
	150	168.3	ASTM A536 disc with EPDM coat	16	Grooved x Grooved			
	200	219.1	ASTM A536 disc with EPDM coat	16	Grooved x Grooved			
	XD381X – with supervisory switch	50	60.3	ASTM A536 disc with EPDM coat	16		Grooved x Grooved	988c/02
		65	73.0	ASTM A536 disc with EPDM coat	16		Grooved x Grooved	
		65	76.1	ASTM A536 disc with EPDM coat	16		Grooved x Grooved	
80		88.9	ASTM A536 disc with EPDM coat	16	Grooved x Grooved			
100		114.3	ASTM A536 disc with EPDM coat	16	Grooved x Grooved			
125		139.7	ASTM A536 disc with EPDM coat	16	Grooved x Grooved			
125		141.3	ASTM A536 disc with EPDM coat	16	Grooved x Grooved			
150		165.1	ASTM A536 disc with EPDM coat	16	Grooved x Grooved			
150		168.3	ASTM A536 disc with EPDM coat	16	Grooved x Grooved			
200		219.1	ASTM A536 disc with EPDM coat	16	Grooved x Grooved			

Keraflo Ltd

Unit 1 Woodley Park Estate, 59-69 Reading Road, Woodley, , Berkshire RG5 3AN, United Kingdom

Tel: 0118 921 9920

E-mail: info@keraflo.co.uk • Website: <https://www.keraflo.co.uk/>

Certificate No: 1642a to Draft LPS 2083

Keraflo Model FB Water Level Control Valves

Product Name	Description	LPCB Ref. No.
FB25	Keraflo Fire FB Type Valve 1 (25mm)	1642a/01
FB50SF	Keraflo Fire FB Type Valve Standard Flow 2 (50mm)	1642a/02
FB80	Keraflo Fire FB Type Valve Standard Flow 3 (80mm)	1642a/03

Rapidrop Global Limited

Rutland Business Park, Newark Road, Peterborough PE1 5WA, United Kingdom

Tel: +44 (0)1733 847 510 • Fax: +44 (0)1733 553 958

E-mail: rapidrop@rapidrop.com • Website: www.rapidrop.com

Certificate No: 566m to LPS 1185: Issue 3.2

Stop Valves

Product Name	Nominal size (DN) (DN)	Pipe Outside Diameter (mm)	Body and Disc Material	Maximum Working Pressure (bar)	End Connections	LPCB Ref. No.
Fig.216 'Rapidrop' Butterfly Valve	50	60.3	ASTM A536 disc with EPDM coat	16	Grooved x Grooved	566m/01
	65	73.0	ASTM A536 disc with EPDM coat	16	Grooved x Grooved	
	65	76.1	ASTM A536 disc with EPDM coat	16	Grooved x Grooved	
	80	88.9	ASTM A536 disc with EPDM coat	16	Grooved x Grooved	
	100	114.3	ASTM A536 disc with EPDM coat	16	Grooved x Grooved	
	125	139.7	ASTM A536 disc with EPDM coat	16	Grooved x Grooved	
	125	141.3	ASTM A536 disc with EPDM coat	16	Grooved x Grooved	
	150	165.1	ASTM A536 disc with EPDM coat	16	Grooved x Grooved	
	150	168.3	ASTM A536 disc with EPDM coat	16	Grooved x Grooved	
	200	219.1	ASTM A536 disc with EPDM coat	16	Grooved x Grooved	

The Viking Corporation

210 N Industrial Park, Hastings, Michigan 49058, USA

Tel: +1 269 945 9501 • Fax: +1 269 945 9599

E-mail: techsvcs@vikingcorp.com • Website: www.vikingcorp.com

Certificate No: 096n to LPS 1185: Issue 3.2

PART 3: SECTION 20

STOP VALVES

Stop Valves

Product Name	Product Name	Nominal size (DN)	Pipe Outside Diameter (mm)	Body and Disc Material	Maximum Working Pressure (bar)	End Connections	LPCB Ref. No.
Fireking Butterfly Valve	BVG-2	50	60.3	ASTM A536 disc with EPDM coat	16	Grooved x Grooved	096n/01
	BVG-2	65	73.0	ASTM A536 disc with EPDM coat	16	Grooved x Grooved	
	BVG-2	65	76.1	ASTM A536 disc with EPDM coat	16	Grooved x Grooved	
	BVG-2	80	88.9	ASTM A536 disc with EPDM coat	16	Grooved x Grooved	
	BVG-2	100	114.3	ASTM A536 disc with EPDM coat	16	Grooved x Grooved	
	BVG-2	125	139.7	ASTM A536 disc with EPDM coat	16	Grooved x Grooved	
	BVG-2	125	141.3	ASTM A536 disc with EPDM coat	16	Grooved x Grooved	
	BVG-2	150	165.1	ASTM A536 disc with EPDM coat	16	Grooved x Grooved	
	BVG-2	150	168.3	ASTM A536 disc with EPDM coat	16	Grooved x Grooved	
	BVG-2	200	219.1	ASTM A536 disc with EPDM coat	16	Grooved x Grooved	
	BVG-1	50	60.3	ASTM A536 disc with EPDM coat	16	Grooved x Grooved	
BVG-1	65	73.0	ASTM A536 disc with EPDM coat	16	Grooved x Grooved		
BVG-1	65	76.1	ASTM A536 disc with EPDM coat	16	Grooved x Grooved		
BVG-1	80	88.9	ASTM A536 disc with EPDM coat	16	Grooved x Grooved		
BVG-1	100	114.3	ASTM A536 disc with EPDM coat	16	Grooved x Grooved		
BVG-1	125	139.7	ASTM A536 disc with EPDM coat	16	Grooved x Grooved		
BVG-1	125	141.3	ASTM A536 disc with EPDM coat	16	Grooved x Grooved		
BVG-1	150	165.1	ASTM A536 disc with EPDM coat	16	Grooved x Grooved		
BVG-1	150	168.3	ASTM A536 disc with EPDM coat	16	Grooved x Grooved		
BVG-1	200	219.1	ASTM A536 disc with EPDM coat	16	Grooved x Grooved		

Victaulic Company

4901 Kesslersville Road, Easton, Pennsylvania 18040, USA

Tel: +1 610 559 3300 • Fax: +1 610 250 8817

E-mail: victaulic@victaulic.com • Website: www.victaulic.com

Certificate No: 104j to LPS 1185 Issue 3.1

Series 705 & 707C Butterfly valve

Product Name	Nominal Size (mm)	Pipe Outside Diameter (mm)	Body Material	Max. Working Pressure (bar)	Connections	LPCB Ref. No.
Series 705 & 707C Butterfly valve	65	73.0	Ductile iron	21	Grooved	104j/01
	65	76.1	Ductile iron	21	Grooved	
	80	88.9	Ductile iron	21	Grooved	
	100	114.3	Ductile iron	21	Grooved	
	125	139.7	Ductile iron	21	Grooved	
		141.3	Ductile iron	21	Grooved	
	150	165.1	Ductile iron	21	Grooved	
		168.3	Ductile iron	21	Grooved	
	200	219.3	Ductile iron	21	Grooved	
	250	273.0	Ductile iron	21	Grooved	
	300	323.9	Ductile iron	21	Grooved	

Certificate No: 104i to LPS 1185: Issue 3.1

Series 728 Ball Valves

Product Name	Nominal Size (mm)	Body Material	Maximum Working Pressure (bar)	Connections	LPCB Ref. No.
Series 728 Ball Valves	DN25	Brass	20	Threaded	104i/01
	DN32	Brass	20	Threaded	
	DN40	Brass	20	Threaded	
	DN50	Brass	20	Threaded	
	DN32	Brass	20	Grooved	
	DN40	Brass	20	Grooved	
	DN50	Brass	20	Grooved	

Certificate No: 104j to LPS1185 Issue 3.1

Series 765 & 766 Butterfly valve

Product Name	Nominal Size (mm)	Pipe Outside diameter (mm)	Body Material	Max Working Pressure (bar)	Connections	LPCB Ref. No.
Series 765 & 766 Butterfly valve	65	73.0	Ductile iron	25	Grooved	104j/02
	65	76.1	Ductile iron	25	Grooved	
	80	88.9	Ductile iron	25	Grooved	
	100	114.3	Ductile iron	25	Grooved	
	125	139.7	Ductile iron	25	Grooved	
		141.3	Ductile iron	25	Grooved	
	150	165.1	Ductile iron	25	Grooved	
		168.3	Ductile iron	25	Grooved	
	200	219.3	Ductile iron	25	Grooved	

PART 3: SECTION 20

STOP VALVES

Product Name	Nominal Size (mm)	Pipe Outside diameter (mm)	Body Material	Max Working Pressure (bar)	Connections	LPCB Ref. No.
	250	273.0	Ductile iron	25	Grooved	
	300	323.9	Ductile iron	25	Grooved	

Certificate No: 846a to LPS 1185: Issue 3.1

Firelock Butterfly Stop Valves

Product Name	Nominal Size (mm)	Pipe Outside Diameter (mm)	Body Material	Max. Working Pressure (bar)	Connections	LPCB Ref. No.
Series 705 & 707C Butterfly valve	80	108.0	Ductile iron	21	Grooved	846a/01
Series 765 & 766 Butterfly Valves	80	108.0	Ductile iron	25	Grooved	846a/02

This section lists products approved in accordance with:

- LPS 1260 *Requirements for testing plastic pipes and fittings for sprinkler systems.*

The 'scope of use' of plastic pipe shall be agreed between the plastics suppliers, purchaser/installer, authority having jurisdiction and/or insurer in accordance with documented supplier 'Installation Instructions' but subject to the following criteria taking precedence.

- 1) Use of plastic pipe and fittings is subject to water authority agreement for the district or territory concerned.
- 2) LPCB Approved quick response sprinklers shall be used with exposed (i.e. fire exposure) plastic pipe and fittings.
- 3) Plastic pipe and fittings are suitable for use only with wet pipe systems.
- 4) Use of water additives is only permitted in accordance with the manufacturer's installation instructions.
- 5) Care should be exercised to ensure that the adhesive joints are adequately cured, in accordance with the manufacturer's installation instructions, prior to pressurisation.
- 6) Plastic pipe and fittings shall not be installed outdoors.
- 7) Where plastic pipe and fittings are exposed (i.e. fire exposure), the system shall be installed close to a flat ceiling construction.
- 8) Sprinkler systems which employ plastic pipe and fittings shall be designed where possible to ensure there are no 'no flow' sections of pipework in the event of sprinkler operation.

Aquatherm GmbH

Biggen 5, D-57439 Attendorn, Germany

Tel: +49 2722 950223 • Fax: +49 2722 950252

E-mail: info@aquatherm.de • Website: www.aquatherm.de

Certificate No: 684a to LPS 1260

'Red Pipe' PPR Plastic Pipe & Fittings

Product Name	Nominal Diameter Range (mm)	Maximum Working Pressure (bar)	LPCB Ref. No.
'Red Pipe' Sprinkler Pipe	20, 25, 32, 40, 50, 63, 75, 90, 110, 125	12	684a/01
Socket	20, 25, 32, 40, 50, 63, 75, 90, 110, 125	12	684a/02
Reducer	25/20, 32/25, 40/32, 50/20, 50/32, 50/40, 63/20, 63/50, 75/50, 75/63, 90/63, 90/75, 110/63, 110/90, 125/90, 125/110	12	684a/03
Elbow, 90°	20, 25, 32, 40, 50, 63, 75, 90, 110, 125	12	684a/04
Elbow, 45°	20, 25, 32, 40, 50, 63, 75, 90, 110, 125	12	684a/05
Tee	20, 25, 32, 40, 50, 63, 75, 90, 110, 125	12	684a/06
Reducing Tee	20x25x20, 25x20x20, 25x20x25, 32x20x20, 32x20x32, 32x25x32, 40x20x40, 40x25x40, 40x32x40, 50x20x50, 50x25x50, 50x32x50, 50x40x50, 63x32x63, 63x40x63, 63x50x63, 75x40x75, 75x50x75, 75x63x75, 90x40x90, 90x50x90, 90x63x90, 90x75x90, 110x63x110, 110x75x110, 110x90x110, 125x75x125, 125x90x125, 125x110x125	12	684a/07
End Cap	20, 25, 32, 40, 50, 63, 75, 90, 110, 125	12	684a/08
Socket Welded Nipple	32, 40, 50, 63, 75, 90, 110, 125	12	684a/09
Saddle Weld-in	40/20, 40/25, 50/20, 50/25, 63/20, 63/25, 63/32, 75/20, 75/25, 75/32, 75/40, 90/20, 90/25, 90/32, 90/40, 110/20, 110/25, 110/32, 110/40, 110/50, 125/20, 125/25, 125/32, 125/40, 125/50, 125/63	12	684a/10
Coupling screw joint	32, 40, 50, 63, 75	12	684a/11

PART 3: SECTION 21.1

PLASTIC PIPES AND FITTINGS

Product Name	Nominal Diameter Range (mm)	Maximum Working Pressure (bar)	LPCB Ref. No.
Wall connection	20x1/2"F, 25x3/4"F	12	684a/12
Transition piece Female	20x1/2"F, 20x3/4"F, 25x1/2"F, 25x3/4" F, 32x1/2"F, 32x3/4"F, 32x1"F, 40x1/2"F, 40x1"F, 40x1 1/4"F, 50x1 1/4"F, 50x1 1/2"F, 63x1 1/2"F, 63x2"F, 75x2"	12	684a/13
Transition piece Male	20x1/2"M, 20x3/4"M, 25x1/2"M, 25x3/4"M, 32x3/4"M, 32x1 1/4"M, 40x1"M, 40x1 1/4"M, 50x1 1/4"M, 50x1 1/2"M, 63x1 1/2"M, 63x2"M, 75x2"M, 75x2 1/2"M, 90x3"M, 110x4"M	12	684a/14
Connecting Union	20/nut R 1", 25/nut R 1 1/4", 32/nut R 1 1/2", 40/nut R 2", 50/nut R 2 1/4", 50/nut R 2 1/2", 63/nut R 2 3/4", 75/nut R 3 1/2", 90/nut R 4"	12	684a/15
Transition joint	nut R 1"x20, nut R 1 1/4"x25, nut R 1 1/2"x32, nut R 2"x40, nut R 2 1/4"x50, nut R 2 3/4"x63, nut R 3 1/2"x75	12	684a/16
Counterpart	1"Mx20, 1 1/4"Mx25, 1 1/2"Mx32, 2"Mx40, 2 1/4"Mx50, 2 3/4"Mx63, 3 1/2"Mx75	12	684a/17
Transition Tee	20x1/2"Fx20, 20x3/4"Fx20, 25x1/2"Fx25, 25x3/4"Fx25, 32x1/2"Fx32, 32x3/4"Fx32, 32x1"Fx32, 40x1/2"Fx40, 40x3/4"Fx40, 50x1"Fx40, 50x1"Fx50, 50x1 1/4"Fx50	12	684a/18
Saddle Weld-in with Female thread & hexagon socket	40/25x1/2"F, 50/25x1/2"F, 63/25x1/2"F, 75/25x1/2"F, 90/25x1/2"F, 110/25x1/2"F, 125/25x1/2"F, 40/25x3/4"F, 50/25x3/4"F, 63/25x3/4"F, 75/25x3/4"F, 90/25x3/4"F, 110/25x3/4"F, 125/125x3/4"F, 75/32x1"F, 90/32x1"F, 110/32x1"F, 125/32x1"F	12	684a/19
Screw-down valve	20, 25, 32, 40	12	684a/20
Inclined valve	20, 25, 32, 40	12	684a/21
Ball cock	75, 90	12	684a/22
Draining branch	40, 50, 63	12	684a/23
Reducing Socket	63/50, 75/63, 90/75	12	684a/24
Elbow, 90° Female/Male	20, 25, 32, 40	12	684a/25
Elbow, 45° Female/Male	20, 25, 32, 40	12	684a/26
Cross	32, 40	12	684a/27
Reducing cross	50/32, 63/32, 63/40, 75/32, 75/40, 75/50, 90/50	12	684a/28
Transition piece round Female	20x1/2"F, 25x1/2"F, 25x3/4"F, 32x1/2"F, 32x3/4"F, 40x3/4"F, 40x1/2"F	12	684a/29
Transition Elbow, 90°C	20x1/2"F, 20x3/4"F, 25x1/2"F, 25x3/4"F, 32x1/2"F, 32x3/4"F, 32x1"F, 40x1/2"F, 40x1"F	12	684a/30
Transition piece for groove connection	40x1", 50x1 1/4", 63x1 1/2" 75x2", 90x3", 110x4", 125x5"	12	684a/31

Spears Manufacturing Company Inc

15853 Olden Street, Sylmar, California 91342, USA

Tel: +1 818 364 1611 • Fax: +1 818 364 6945

E-mail: MBaker@Spearsmfg.net • Website: www.spearsmfg.com

Certificate No: 293b to LPS 1260: Issue 3.1

Spears® FlameGuard® Chlorinated Polyvinyl Chloride (CPVC) Sprinkler Fittings

Product Name	Nominal Size (in.)	Part Number	Maximum Working Pressure (bar)	LPCB Ref. No.
Tee (Soc x Soc x Soc)	3/4	4201-007	12	293b/01
	1	4201-010	12	
	1 1/4	4201-012	12	
	1 1/2	4201-015	12	
	2	4201-020	12	
	2 1/2	4201-025	12	
	3	4201-030	12	
Reducing Tee (Soc x Soc x Soc)	3/4x3/4x1	4201-102	12	293b/02
	1x3/4x3/4	4201-125	12	
	1x3/4x1	4201-126	12	
	1x1x3/4	4201-131	12	
	1 1/4x1x3/4	4201-157	12	
	1 1/4x1x1	4201-158	12	
	1 1/4x1x1 1/4	4201-159	12	

PART 3: SECTION 21.1

PLASTIC PIPES AND FITTINGS

Product Name	Nominal Size (in.)	Part Number	Maximum Working Pressure (bar)	LPCB Ref. No.
	1¼x1¼x¾	4201-167	12	
	1¼x1¼x1	4201-168	12	
	1¼x1¼x1½	4201-169	12	
	1½x1¼x¾	4201-201	12	
	1½x1¼x1	4201-202	12	
	1½x1½x¾	4201-210	12	
	1½x1½x1	4201-211	12	
	1½x1½x1¼	4201-212	12	
	1½x1½x2	4201-213	12	
	2x2x¾	4201-248	12	
	2x2x1	4201-249	12	
	2x2x1½	4201-251	12	
	2½x2½x1	4201-289	12	
	2½x2½x1¼	4201-290	12	
	2½x2½x1½	4201-291	12	
	3x3x2	4201-338	12	
	3x3x2½	4201-339	12	
Street Tee (Sprig x Soc x Soc)	¾	4244-007	12	293b/03
	1	4244-010	12	
	1¼	4244-012	12	
	1½	4244-015	12	
	2	4244-020	12	
Sprinkler Head Tee (Soc x Soc x Metal FIPT)	¾x¾x½	4202-101	12	293b/04
	1x¾x½	4202-124	12	
	1x1x½	4202-130	12	
	1x1x1	4202-010	12	
	1¼x1x½	4202-156	12	
	1¼x1¼x½	4202-166	12	
	1½x1¼x1½	4202-199	12	
	1½x1½x½	4202-209	12	
	2x1½x½	4202-237	12	
	2x2x½	4202-247	12	
Sprinkler Head Tee (Soc x Soc x SR FIPT)	¾x¾x½	4202-101SR	12	293b/05
	1x¾x½	4202-124SR	12	
	1x1x½	4202-130SR	12	
	1x1x1	4202-010SR	12	
	1¼x1x½	4202-156SR	12	
	1¼x1¾x½	4202-166SR	12	
	1½x1¼x½	4202-199SR	12	
	1½x1½x½	4202-209SR	12	
	1½x1½x1	4202-211SR	12	
	2x1½x½	4202-237SR	12	
	2x2x½	4202-247SR	12	
Sprinkler Head Tee (Soc x Metal FIPT x Soc)	1x½x1	4203-122	12	293b/06
Sprinkler Head Tee (Soc x SR FIPT x Soc)	1x½x1	4203-122SR	12	
Sprinkler Head Tee, Sidewall (SR FIPT x SR FIPT x Soc)	½x½x1	4243-075SR	12	293b/07
Cross (All Socket)	¾	4220-007	12	293b/08
	1	4220-010	12	
	1¼	4220-012	12	
	1½	4220-015	12	
	2	4220-020	12	
	2½	4220-025	12	
	3	4220-030	12	
Reducing Cross (All Socket)	1x¾x¾	4220-131	12	293b/09
Sprinkler Head Cross, Sidewall (Soc x SR FIPT)	1x½	4221-130SR	12	293b/10
	1x¾	4221-131SR	12	
90° Elbow (All Socket)	¾	4206-007	12	293b/11
	1	4206-010	12	
	1¼	4206-012	12	
	1½	4206-015	12	
	2	4206-020	12	
	2½	4206-025	12	
	3	4206-030	12	
Reducing 90° Elbow (All Socket)	1x¾	4206-131	12	293b/12
90° Street Elbow (Spig x Soc)	¾	4209-007	12	293b/13
	1	4209-010	12	
	1-¼	4209-012	12	

PART 3: SECTION 21.1

PLASTIC PIPES AND FITTINGS

Product Name	Nominal Size (in.)	Part Number	Maximum Working Pressure (bar)	LPCB Ref. No.
	1-½	4209-015	12	
	2	4209-020	12	
Sprinkler Head 90° Elbow (Socket x Metal FIPT)	¾x½	4207-101	12	293b/14
	1x½	4207-130	12	
Sprinkler Head Cross, Sidewall (Soc x SR FIPT)	1x¾	4207-131	12	
Sprinkler Head 90° Elbow (Socket x Metal FIPT)	1¾x½	4207-166	12	
	¾x½	4207-101SR	12	
	1x½	4207-130SR	12	
	1x¾	4207-131SR	12	
	1¼x½	4207-166SR	12	
45° Elbow (All Socket)	¾	4217-007	12	293b/15
	1	4217-010	12	
	1¼	4217-012	12	
	1½	4217-015	12	
	2	4217-020	12	
	2½	4217-025	12	
	3	4217-030	12	
Coupling (Soc x Soc)	¾	4229-007	12	293b/16
	1	4229-010	12	
	1¼	4229-012	12	
	1½	4229-015	12	
	2	4229-020	12	
	2½	4229-025	12	
	3	4229-030	12	
Reducer Coupling (Soc x Soc)	1x¾	4229-131	12	293b/17
	1¼x¾	4229-167	12	
	1¼x1	4229-168	12	
	1½x¾	4229-210	12	
	1½x1	4229-211	12	
	1½x1¼	4229-212	12	
	2x¾	4229-248	12	
	2x1	4229-249	12	
	2x1¼	4229-250	12	
	2x1½	4229-251	12	
	2½x1½	4229-291	12	
	2½x2	4229-292	12	
Reducer Bushing (Spig x Soc)	1x¾	4237-131	12	293b/18
	1¼x¾	4237-167	12	
	1¼x1	4237-168	12	
	1½x¾	4237-210	12	
	1½x1	4237-211	12	
	1½x1¼	4237-212	12	
	2x¾	4237-248	12	
	2x1	4237-249	12	
	2x1¼	4237-250	12	
	2x1½	4237-251	12	
	2½x1¼	4237-290	12	
	2½x1½	4237-291	12	
	2½x2	4237-292	12	
	3x2	4237-338	12	
	3x2½	4237-339	12	
Cap (Soc)	¾	4247-007	12	293b/19
	1	4247-010	12	
	1¼	4247-012	12	
	1½	4247-015	12	
	2	4247-020	12	
	2½	4247-025	12	
	3	4247-030	12	
Grooved Coupling Adapter (Grv x Soc)	1¼	4233-012	12	293b/20
	1½	4233-015	12	
	2	4233-020	12	
	2½	4233-025	12	
	3	4233-030	12	
Female Adapter (Soc x Metal FIPT)	¾	4235-007	12	293b/21
	1	4235-010	12	
	1¼	4235-012	12	
	1½	4235-015	12	
	2	4235-020	12	
Sprinkler Head Adapter Long Body (Soc x Metal FIPT)	1x½	L4235-130	12	293b/22

PART 3: SECTION 21.1

PLASTIC PIPES AND FITTINGS

Product Name	Nominal Size (in.)	Part Number	Maximum Working Pressure (bar)	LPCB Ref. No.
Sprinkler Head Adapter With Positioning Ring (Soc x Metal FIPT)	¾x½	R4235-101	12	
Sprinkler Head Adapter (Soc x Metal FIPT)	¾x½	4235-101	12	
	1x½	4235-130	12	
	1x¾	4235-131	12	
Female Adapter (Soc x SR FIPT)	¾	4235-007SR	12	293b/23
	1	4235-010SR	12	
	1¼	4235-012SR	12	
Sprinkler Head Adapter (Soc x SR FIPT)	¾x½	4235-101SR	12	293b/24
	1x1½	4235-130SR	12	
	1x¾	4235-131SR	12	
Spigot Sprinkler Head Adapter (Spig x Metal FIPT)	3x½	4238-101	12	293b/25
Spigot Sprinkler Head Adapter (Spig x Metal FIPT)	1x1½	4238-130	12	
Spigot Sprinkler Head Adapter (Spig x SR FIPT)	¾x½	4238-101SR	12	293b/26
	1x½	4238-130SR	12	
Spigot Female Adapter (Spig x Metal FIPT)	¾	4278-007	12	293b/27
	1	4278-010	12	
Spigot Female Adapter (Spig x SR FIPT)	¾	4278-007SR	12	293b/28
	1	4278-010SR	12	
Adjustable Sprinkler Head Adapter (Soc x Metal FIPT)	¾x½	42001	12	293b/29
	1x½	42011	12	
Adjustable Sprinkler Head Adapter (Spig x Metal FIPT)	¾x½	42004	12	293b/30
	1x½	42014	12	
Adjustable Sprinkler Head Adapter (Soc x SR FIPT)	¾x½	42001SR	12	293b/31
	1x½	42011SR	12	
Adjustable Sprinkler Head Adapter (Spig x SR FIPT)	¾x½	42004SR	12	293b/32
	1x½	42014SR	12	
Flange (Soc)	¾	4251-007	12	293b/33
	1	4251-010	12	
	1¼	4251-012	12	
	1½	4251-015	12	
	2	4251-020	12	
	2½	4251-025	12	
	3	4254-030	12	
Flange, Van Stone Style (Spig)	¾	4256-007	12	293b/34
	1	4256-010	12	
	1¼	4256-012	12	
	1½	4256-015	12	
	2	4256-020	12	
	2½	4256-025	12	
	3	4256-030	12	
Flange, Blind	¾	4253-007	12	293b/35
	1	4253-010	12	
	1¼	4253-012	12	
	1½	4253-015	12	
	2	4253-020	12	
	2½	4253-025	12	
	3	4253-030	12	
Union (Soc x Soc)	¾	4257-007	12	293b/36
	1	4257-010	12	
	1¼	4257-012	12	
	1½	4257-015	12	
	2	4257-020	12	
Union (Soc x Metal FIPT)	¾	4259-007BR	12	293b/37
	1	4259-010BR	12	
	1¼	4259-012BR	12	
	1½	4259-015BR	12	
	2	4259-020BR	12	

Certificate No: 293b to LPS 1260: Issue 3.1

Spears® FlameGuard® Chlorinated Polyvinyl Chloride (CPVC) Sprinkler Pipe

Product Name	Nominal Size (in.)	Maximum Working Pressure (bar)	LPCB Ref. No.
Spears FlameGuard Fire Sprinkler Pipe	¾, 1, 1¼, 1½, 2, 2½, 3	12	293b/38

PART 3: SECTION 21.1

PLASTIC PIPES AND FITTINGS

Certificate No: 293b to LPS 1260: Issue 3.1

Spears® FlameGuard® QuickTorque™ Gasket Sealed Special Reinforced Chlorinated Polyvinyl Chloride (CPVC) Sprinkler Fittings

Product Name	Nominal Size (in.)	Part Number	Maximum Working Pressure (bar)	LPCB Ref. No.
Female Sprinkler Head Adapter - Metal Thread Insert (Soc X SR FIPT)	¾"x½"	4235-101GMR	12	293b/39
	1"x½"	4235-130GMR	12	

Certificate No: 293b to LPS 1260: Issue 3.1

Spears® FlameGuard® TorqueSafe™ Gasket Sealed Chlorinated Polyvinyl Chloride (CPVC) Sprinkler Fittings

Product Name	Nominal Size (in.)	Part Number	Maximum Working Pressure (bar)	LPCB Ref. No.
Female Sprinkler Head Adapter - Brass Thread Insert (Soc X FIPT)	¾"x½"	4235-101G	12	293b/40
	1"x½"	4235-130GS	12	
Sprinkler Head 90° elbow- Brass Thread Insert (Soc X FIPT)	1"x¾"	4235-131G	12	293b/41
	¾"x½"	4207-101G	12	
Sprinkler Head Tee - Brass Thread Insert (Soc X Soc X FIPT)	1"x½"	4207-130G	12	293b/42
	1¼"x½"	4207-166G	12	
Sprinkler Head Reducing Tee - Brass Thread Insert (Soc X Soc X FIPT)	¾"x½"	4202-101G	12	293b/43
	1"x¾"x½"	4202-124G	12	
Sprinkler Head Tee - Brass Thread Insert (Soc X Soc X FIPT)	1"x½"	4202-130G	12	293b/44
	1¼"x½"	4202-166G	12	
	1½"x½"	4202-209G	12	
	2"x½"	4202-247G	12	
Sprinkler Head Reducing Tee - Brass Thread Insert (Soc X FIPT X Soc)	1"x½"x1"	4203-122G	12	293b/45
	¾"x½"	4238-101G	12	
Female Spigot Adapter - Brass Thread Insert (Spigot X FIPT)	1"x½"	4238-130G	12	293b/45
	1"x½"	4238-130BRG	12	

Certificate No: 293b to LPS 1260: Issue 3.1

Spears® FlameGuard® SofTorque™ Gasket Sealed Special Reinforced Chlorinated Polyvinyl Chloride (CPVC) Sprinkler Fittings

Product Name	Nominal Size (in.)	Part Number	Maximum Working Pressure (bar)	LPCB Ref. No.
Sprinkler Head Tee (Soc X Soc X SR FIPT)	¾"x½"	4202-101GSR	12	293b/46
	1"x¾"x½"	4202-124GSR	12	
	1"x½"	4202-130GSR	12	
Sprinkler Head Reducing Tee (Soc X SR FIPT X Soc)	1"x½"x1"	4202-122GSR	12	293b/47
	¾"x½"	4207-101GSR	12	
Sprinkler Head 90° elbow (Soc X SR FIPT)	1"x½"	4207-130GSR	12	
	1¼"x½"	4207-166GSR	12	

PART 3: SECTION 21.1

PLASTIC PIPES AND FITTINGS

Product Name	Nominal Size (in.)	Part Number	Maximum Working Pressure (bar)	LPCB Ref. No.
Female Sprinkler Head Adapter - (Soc X SR FIPT)	¾"x½"	4235-101GSR	12	293b/49
	1"x½"	4235-130GSR	12	
	1"x¾"	4235-131GSR	12	
Bushing (Spigot X SR FIPT)	1"x½"	4238-130GSR	12	293b/50
		4278-101GSR	12	
Spigot Female Head Adapter - (Spigot X SR FIPT)	¾"x½"	4278-101GSR	12	293b/51
	1"x½"	4278-130GSR	12	

Tyco Fire & Building Products (Madison)

245 Swancott Road, Madison, Alabama 35756, USA

Tel: +1 256 464 5633 • Fax: +1 256 464 5635

UK Sales Enquiries:

Tel: +44 (0)161 875 0400 • Fax: +44 (0)161 875 0491

E-mail: info-uk@tyco-bspd.com • Website: www.tycobuilding.com

Certificate No: 420a to LPS 1260: Issue 3.1

TYCO FIRE PRODUCTS CHLORINATED POLYVINYLCHLORIDE (CPVC) BLAZEMASTER SPRINKLER FITTINGS

Product Name	Nominal Diameter Range	Maximum Working Pressure (bar)	LPCB Ref. No.
Cap	0.75", 1.0", 1.25", 1.5", 2.0", 2.5", 3.0"	12	420a/01
Straight coupling	0.75", 1.0", 1.25", 1.5", 2.0", 2.5", 3.0"	12	420a/02
Reducer bush	1.0"x0.75", 1.25"x0.75", 1.25"x1.0", 1.5"x0.75", 1.5"x1.0", 1.5"x1.25", 2.0"x0.75", 2.0"x1.0", 2.5"x1.0", 2.0"x1.25", 2.0"x1.5", 2.5"x1.25", 2.5"x1.5", 2.5"x2.0"	12	420a/03
90° Elbow	0.75", 1.0", 1.25", 1.5", 2.0", 2.25", 2.5", 3"	12	420a/04
45° Elbow	0.75", 1.0", 1.25", 1.5", 2.0"	12	420a/05
Tee	0.75", 1.0", 1.25", 1.5", 2.0", 2.5", 3"	12	420a/06
Reducing Tee	0.75"x0.75"x1.0", 1.0"x0.75"x0.75", 1.0"x0.75"x1.0", 1.0"x1.0"x 0.75", 1.25"x1.0"x0.75", 1.25"x1.0"x1.0", 1.25"x1.0"x1.25", 1.25"x1.25"x0.75", 1.25"x1.25"x1.0", 1.25"x1.25"x1.5", 1.5"x1.25"x0.75", 1.5"x1.25"x1.0", 1.5"x1.5"x0.75", 1.5"x1.5"x1.25", 1.5"x1.5"x1.0", 2.0"x2.0"x3", 2.0"x2.0"x1.0", 2.0"x2.0"x1.25", 2.0"x2.0"x1.5", 2.5"x2.5"x1.0", 2.5"x2.5"x1.25", 2.5"x2.5"x2.0", 3.0"x3.0"x1.5", 3.0"x3.0"x2.0", 3.0"x3.0"x2.5"	12	420a/07
Cross	0.75", 1.0", 1.25", 1.5", 2.0", 2.5", 3"	12	420a/08
Slip sprinkler head adapters	0.75"x0.5", 1.0"x0.5", 1.0"x0.75"	12	420a/09
Reducer	1.0"x0.75"	12	420a/11
Coupling			
Spigot sprinkler head Adaptor	0.75"x0.5", 1.0"x0.5"	12	420a/12
Sprinkler head 90° Elbow	0.75"x0.5", 1.0"x0.5"	12	420a/19
Sprinkler head tee	0.75"x0.75"x0.5", 1.0"x1.0"x0.5", 1.0"x1.0"x1.0", 1.25"x1.25"x0.5", 1.25"x1.0"x0.5", 1.5"x1.25"x0.5", 1.5"x1.5"x0.5", 2.0"x1.5"x0.5", 2.0"x2.0"x0.5"	12	420a/20
Reducing elbow 90°	1.0"x0.75"	12	420a/23
Male adapter NPT	0.75", 1.0"	12	420a/24
Male adapter ISO 7/1	1.0"	12	

PART 3: SECTION 21.1

PLASTIC PIPES AND FITTINGS

Product Name	Nominal Diameter Range	Maximum Working Pressure (bar)	LPCB Ref. No.
Sprinkler head tee (back to back)	1.0"x0.5" NPT (38"), 1.0"x0.5" NPT (58")	12	420a/26
Cross (back to back)	1.0"x0.5" NPT (38"), 1.0"x0.5" NPT (58")	12	420a/27
Female adapter NPT	0.75", 1", 1.25", 1.5", 2.0"	12	420a/28
Female adapter ISO 7/1	1", 1.25", 1.5", 2.0"	12	
Reducing Cross	1"x1"x0.75"x0.75"	12	420a/29
Grooved Adapter	1.25", 1.50", 2", 2.50" x 76.1mm, 3"	12	420a/30
NPS Female 90° Adapter Elbow	¾" x ½", 1" x ½"	12	420a/31
NPS Female Adapter	¾" x ½", 1" x ½"	12	420a/32
NPS Female Adapter-Spigot	1" x ½"	12	420a/33
RSA 2.0 Female & Spigot Combo	¾" x 1"	12.07	420a/34
RSA 2.0, 90° Elbow	1", ¾"	12.07	420a/35
RSA 2.0 Female	1	12.07	420a/36
RSA 2.0 Tee	1"x1"x½", ¾"x¾" x½"	12.07	420a/37
RSA 2.0 Spigot	¾" x½"	12.07	420a/38
RSA 2.0 Back to Back Tee	1"x½"x½", 3 ⅜" 1"x½"x½", 3 ⅝"	12.07	420a/39
RSA 2.0 Back to Back Cross	1"x1"x½"x½", 3 ⅜" 1"x1"x½"x½", 3 ⅝"	12.07	420a/40

Certificate No: 420a to LPS 1260: Issue 3.1

TYCO FIRE PRODUCTS CHLORINATED POLYVINYLCHLORIDE (CPVC) BLAZEMASTER SPRINKLER PIPE

Product Name	Nominal Diameter Range	Maximum Working Pressure (bar)	LPCB Ref. No.
Pipe	0.75", 1.0", 1.25", 1.5", 2.0", 2.5", 3.0"	12	420a/21

PART 3: SECTION 21.1

PLASTIC PIPES AND FITTINGS

Viking Plastics

202 Industrial Drive, Huntsville AL 35811, USA
Tel: 001 256 858 3711 • Fax: 001 256 858 3775
E-mail: techsvcs@vikingcorp.com • Website: www.vikingcorp.com

UK Sales Enquiries

Tel: +44(0) 1724 295 300 • Fax: +44(0) 1724 295 301
E-mail: vikinguk@vikingcorp.com

Certificate No: 837a to LPS 1260

Viking Plastics 'Blazemaster®' Chlorinated Polyvinyl Chloride (CPVC) Sprinkler Pipe

Product Name	Nominal Diameter Range	Maximum Working Pressure (bar)	LPCB Ref. No.
CPVC Sprinkler Pipe	0.75, 1, 1.25, 1.5 2, 2.5", 3"	12	837a/01

Viking Plastics LLC

105 Quality Court, Charlestown, Indiana 47111, USA
Tel: +1 269 945 9501 • Fax: +1 269 945 9501
E-mail: techsvcs@vikingcorp.com • Website: www.vikinggroupinc.com

Headquarters Address

5150 Beltway Dr SE, Caledonia MI 49316, USA
Tel: +1 269 945 9501 • Fax: +1 269 945 9501
E-mail: techsvcs@vikingcorp.com • Website: www.vikinggroupinc.com

Certificate No: 1559a to LPS 1260: Issue 3.1

Viking Plastics Blazemaster® Chlorinated Polyvinyl Chloride (CPVC) Sprinkler Fittings

Product Name	Size	Model	LPCB Ref. No.
Coupling	¾"	V5001-007	1559a/01
	1"	V5001-010	
	1¼"	V5001-012	
	1½"	V5001-015	
	2"	V5001-020	
Reducing Coupling	1"x¾"	V5001R-131	1559a/02
	1¼"x1"	V5001R-168	
Grooved Coupling	1¼"	V5001-G-012	1559a/03
	1½"	V5001-G-015	
	2"	V5001-G-020	
	2½"	V5001-G-025	
	65mm x 2½"	V5001-G	
Female Adapter w/Metal Thd Insert	3"	V5001-G-030	1559a/04
	¾"	V5003-2-BI-007	
	1"	V5003-2-BI-010	
Female Sprinkler Head Adapter w/Metal Thd Insert	¾"x½"	V5003-2-S-BI-101	1559a/05
	1"x½"	V5003-2-S-BI-130	
Female Adapter w/Metal Thd Insert	¾"	V5003-BI-007	1559a/06
	1"	V5003-BI-010	
	1¼"	V5003-BI-012	
	1½"	V5003-BI-015	
	2"	V5003-BI-020	
Female Sprinkler Head Adapter w/Metal Thd Insert	¾"x½"	V5003-S-BI-101	1559a/07
	1"x½"	V5003-S-BI-130	
	1"x¾"	V5003-S-BI-131	
Female Adapter w/ Metal BSPT Thd Insert	1"	V5003-BI-BSP-010	1559a/08

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PLASTIC PIPES AND FITTINGS

Product Name	Size	Model	LPCB Ref. No.
Male Adapter w/Metal Thd Insert	1¼"	V5003-BI-BSP-012	1559a/09
	1½"	V5003-BI-BSP-015	
	2"	V5003-BI-BSP-020	
	¾"	V5004-BI-007	
	1"	V5004-BI-010	
45 Elbow	1¼"	V5004-BI-012	1559a/10
	1½"	V5004-BI-015	
	2"	V5004-BI-020	
	¾"	V5006-007	
	1"	V5006-010	
	1¼"	V5006-012	
	1½"	V5006-015	
90 Elbow	2"	V5006-020	1559a/11
	2½"	V5006-025	
	3"	V5006-030	
	¾"	V5007-007	
	1"	V5007-010	
Sprinkler Head 90 w/Metal Thd Insert	1¼"	V5007-012	1559a/12
	1½"	V5007-015	
	2"	V5007-020	
	¾"x½"	V5007-3-S-BI-101	
90 Reducing Elbow	1"x½"	V5007-3-S-BI-130	1559a/13
	1"x¾"	V5007-3-S-BI-131	
	1¼"x½"	V5007-3-S-BI-166	
Tee	1"x¾"	V5007R-131	1559a/14
	¾"	V5011-007	
Reducing Tee	1"	V5011-010	
	1¼"	V5011-012	
	1½"	V5011-015	
	2"	V5011-020	
	3"	V5011-030	
	¾"x¾"x1"	V5011R-102	
	1"x1"x¾"	V5011R-131	
	1"x¾"x1"	V5011R-126	
	1"x¾"x¾"	V5011R-125	
	1¼"x1¼"x1"	V5011R-168	
	1¼"x1¼"x¾"	V5011R-167	
	1¼"x1"x1¼"	V5011R-159	
	1¼"x1"x1"	V5011R-158	
	1¼"x1"x¾"	V5011R-157	
	1¼"x1¼"x1½"	V5011R-169	
	1½"x1½"x1¼"	V5011R-212	
	1½"x1½"x1"	V5011R-211	
1½"x1½"x¾"	V5011R-210		
1½"x1¼"x1"	V5011R-202		
1½"x1¼"x¾"	V5011R-201		
1½"x1½"x2"	V5011R-213		
2"x2"x1½"	V5011R-251		
2"x2"x1¼"	V5011R-250		
2"x2"x1"	V5011R-249		
2"x2"x¾"	V5011R-248		
3"x3"x2"	V5011R-338		
2½"x2½"x2"	V5011R-292		
2½"x2½"x1½"	V5011R-291		
2½"x2½"x1¼"	V5011R-290		
2½"x2½"x1"	V5011R-289		
3"x3"x2½"	V5011R-339		
3"x3"x1½"	V5011R-337		
Sprinkler Head Tee w/Metal Thd Insert	1"x¾"x½"	V5012R-S-BI-124	1559a/15
	1"x½"x1"	V5012R-S-BI-122	
	1¼"x1"x½"	V5012R-S-BI-156	
	1½"x1¼"x½"	V5012R-S-BI-199	
	2"x1½"x½"	V5012R-S-BI-237	
Cap	1"	V5012-S-BI-010	1559a/16
	¾"x¾"x½"	V5012-S-BI-101	
	1"x1"x½"	V5012-S-BI-130	
	1¼"x1¼"x½"	V5012-S-BI-166	
	1½"x1½"x½"	V5012-S-BI-209	
	2"x2"x1½"	V5012-S-BI-247	
	¾"	V5017-007	
1"	V5017-010		
1½"	V5017-015		
1¼"	V5017-012		

PART 3: SECTION 21.1

PLASTIC PIPES AND FITTINGS

Product Name	Size	Model	LPCB Ref. No.
Bushing	2"	V5017-020	1559a/18
	2½"	V5017-025	
	3"	V5017-030	
	1"x¾"	V5018-131	
	1¼"x1"	V5018-168	
	1¼"x¾"	V5018-167	
	1½"x1¼"	V5018-212	
	1½"x1"	V5018-211	
	1½"x¾"	V5018-210	
	2"x1½"	V5018-251	
	2"x1¼"	V5018-250	
	2"x1"	V5018-249	
	2"x¾"	V5018-248	
	2½"x2"	V5018-292	
Flush Bushing SHA (Spg x Thd) Cross	1" x 1½"	V5018-S-BI-130	1559a/19
	¾"	V5035-007	1559a/20
	1"	V5035-010	
	1¼"	V5035-012	
	1½"	V5035-015	
	2"	V5035-020	
	2½"	V5035-025	
	3"	V5035-030	
	1"x1"x¾"x¾"	V5035R-131	1559a/21
	¾"x½"	5003-S-BG	1559a/22
Rubber Seated Sprinkler Head Adapter – Socket	1"x½"	5003-S-BG	1559a/23
	¾"x½"	5003-2-S-BG	
Rubber Seated Sprinkler Head Adapter – Spigot	¾"x½"	5003-2-S-BG	1559a/23
	1"x½"	5003-2-S-BG	

PART 3: SECTION 21.2

POLYMERIC COMPOUNDS FOR PLASTIC PIPES AND FITTINGS

This section lists products approved in accordance with:

- LPS 1260 *Requirements for testing plastic pipes and fittings for sprinkler systems.*

Notes:

The compounds listed in this section have been tested and approved for the production of the plastic pipes and fittings listed in Section 21.1.

As the pipes and fittings themselves must be tested and approved to LPS 1260, only those products listed in Part 3 Section 21.1 are LPCB approved. Products manufactured from compounds in section 21.2 but not listed in Part 3 Section 21.1 are not LPCB approved.

Lubrizol Advanced Materials Inc

4200 Bells Lane, Louisville, Kentucky 40211, USA

Tel: +1 502 7725709

E-mail: Forest.Hampton@Lubrizol.com • Website: www.lubrizol.com

Additional address:

Lubrizol Advanced Materials Inc, 9911 Brecksville Road, Cleveland, Ohio 44141, USA

Tel: +1 216 4477239

E-mail: Forest.Hampton@Lubrizol.com • Website: www.lubrizol.com

Certificate No: 535a to LPS 1260: Issue 3.1

CPVC Compounds

Product Name	Part No.	LPCB Ref. No.
CPVC Pipe Compound	88738 ORG 734G	535a/05
	3138 ORG 734G	535a/07
CPVC Fitting Compound	88065 ORG 734G	535a/06
	3238 ORG 734G	535a/08
CPVC Pipe Compound	88738 Orange 734O	535a/09
	3138 Orange 734O	535a/11
CPVC Fitting Compound	88065 Orange 734O	535a/10
	3238 Orange 734O	535a/12

This section lists products approved in accordance with:

- LPCB Schedule of requirements

Metron actuators listed below have been evaluated in relation to their general performance capability but not in relation to their suitability for specific applications.

LPCB strongly recommends that:

- 1) Care shall be exercised to ensure that the monitoring current specified by the manufacturer is not exceeded.
- 2) The manufacturer's installation instructions and product safety instructions shall be followed.
- 3) These devices shall be replaced every ten years.

Chemring Energetics Limited

Ardeer Site, Stevenston, Ayrshire, Scotland KA20 3LN, United Kingdom

Tel: +44 (0)1294 487007 • Fax: +44 (0)1294 487230

E-mail: campbell.howie@chemringenergetics.co.uk • Website: www.chemringenergetics.co.uk

Certificate No: 313a to an LPCB schedule of requirements

Protractor 'Metron' Actuators

Product Name	Stroke (mm)	Work Output J (minimum)	Resistance Range Ohms	Allfire Amps (50ms)	Nofire Amps (5 sec)	LPCB Ref. No.
DR2001/C13	3.4	0.69	0.9 to 1.6	0.6	0.3	313a/01
DR2003/C1	3.4	1.18	0.9 to 1.6	0.6	0.3	313a/02
DR2003/C6	3.4	1.18	0.9 to 1.6	0.6	0.3	
DR2003/C35	3.4	1.18	0.9 to 1.6	0.6	0.3	
DR2004/C1	9.5	3.43	0.9 to 1.6	0.6	0.3	313a/03
DR2005/C1	9.5	3.43	0.9 to 1.6	0.6	0.3	313a/04
DR2005/C2	9.5	3.43	0.9 to 1.6	0.6	0.3	
DR2005/C3	9.5	3.43	0.9 to 1.6	0.6	0.3	
DR2005/C6	9.5	3.43	0.9 to 1.6	0.6	0.3	
DR2005/C9	9.5	3.43	0.9 to 1.6	0.6	0.3	
DR2005/C35	9.5	3.43	0.9 to 1.6	0.6	0.3	
DR2006/C1	13.5	4.9	0.9 to 1.6	0.6	0.3	313a/05
DR2006/C2	13.5	4.9	0.9 to 1.6	0.6	0.3	
DR2014/C1	9.5	4.9	0.9 to 1.6	0.6	0.3	313a/06
DR2053	3.4	0.8	7 to 12	0.16	0.05	313a/07

PART 3: SECTION 23

WATER MOTOR ALARMS

This section lists products approved in accordance with:

- EN12259-4 *Fixed firefighting systems. Components for sprinkler & water spray systems. Water motor alarms.*

MEFA Italia SpA

Via G.B. Morgagni, 16B, Pogliano Milanese (MI) 20010, Italy

Tel: +39 02 93540195 • Fax: +39 02 93543208

E-mail: danielepeluso@mefaitalia.com • Website: www.mefaitalia.com

Certificate No: 638Ab to EN 12259-4: 2000

Model E Water Motor Alarm

Product Name	Model	LPCB Ref. No.
Water Motor Alarm	Model E	638Ab/01

Rapidrop Global Limited

Rutland Business Park, Newark Road, Peterborough PE1 5WA, United Kingdom

Tel: +44 (0)1733 847 510 • Fax: +44 (0)1733 553 958

E-mail: rapidrop@rapidrop.com • Website: www.rapidrop.com

Certificate No: 566c to EN 12259-4:2000 + Amendment A1:2001

Water Motor Alarms

Product Name	Model	LPCB Ref. No.
Water Motor Alarm	Model E	566c/01

Rolland Sprinklers

235 Route de la Biolle, ZA le Sauvage, Mognard 73410, France

Tel: +33 479 547 250 • Fax: +33 479 547 248

E-mail: info@rolland-sprinklers.com

Certificate No: 295d to EN 12259-4

Model E Water Motor Alarm

Product Name	Model	LPCB Ref. No.
Water Motor Alarm	Model E	295d/01

The Reliable Automatic Sprinkler Co., Inc,

1470 Smith Grove Road, Liberty, South Carolina 29657, USA

Tel: +1 864 843 1734 • Fax: +1 864 843 1418

E-mail: jcevallos@reliablesprinkler.com • Website: www.reliablesprinkler.com**UK Sales Enquiries:**

Tel: +44 (0)1372 728899 • Fax: +44 (0)1372 724461

Certificate No: 034f

Approved Products

Water Motor Alarm Model C

LPCB Ref.
No.
034f/01**The Viking Corporation**

210 N Industrial Park, Hastings, Michigan 49058, USA

Tel: +1 269 945 9501 • Fax: +1 269 945 9599

E-mail: techsvcs@vikingcorp.com • Website: www.vikingcorp.com**UK Sales Enquiries**

Tel: +44(0) 1427 875999 • Fax: +44(0) 1427 875998

Certificate No: 096u to EN 12259-4:2000 +Amendment A1:2001

F-2 Water Motor Alarm

Product Name	Model	LPCB Ref. No.
Water Motor Alarm (1)	F-2	096u/01

Tyco Building Services Products B.V. part of the Johnson Controls group of Companies

Kopersteden 1, 7547 TJ Enschede, The Netherlands

Tel: +31 53 4284444 • Fax: +31 53 4283377

E-mail: info-NL@tyco-bspd.com • Website: www.tycobuilding.com

Certificate No: 169k to EN 12259-4: 2000 +A1

Water Motor Alarm

Product Name	Model	LPCB Ref. No.
Water Motor Alarm	WMA-1	169k/01

PART 3: SECTION 23

WATER MOTOR ALARMS

Venus Fire Protection Ltd

4105, Portland Blvd, Sherbrooke (Quebec) J1L 1X9, Canada

Tel: +1 819 820 8000 • Fax: +1 819 820 8002

E-mail: venus@venus.ca • Website: www.venus-fire.com

Certificate No: 638b to EN 12259-4:2000 including amendment A1:2001

Astra Model E Water Motor Alarm

Certificated Products

Water Motor Alarm Model E

**LPCB Ref.
No.**
638b/01

Victaulic Company

4901 Kesslersville Road, Easton, Pennsylvania 18040, USA

Tel: +1 610 559 3300 • Fax: +1 610 250 8817

E-mail: victaulic@victaulic.com • Website: www.victaulic.com

Certificate No: 104f to EN 12259-4

Series 760 Water Motor Alarm

Certificated Products

Water Motor Alarm Series 760

**LPCB Ref.
No.**
104f/01

Certificate No: 104o to EN 12259-4:2000 + A1:2001

Globe Water Motor Alarm

Product Name	Model	LPCB Ref. No.
Water Motor Alarm	Model WM	104o/01