FESCO

FIRE EQUIPMENT & SERVICE COMPANY

Sprinkler

Paratech builds the reliability, we guarantee

PARATECH

SPRINKLER

UL c us LISTED

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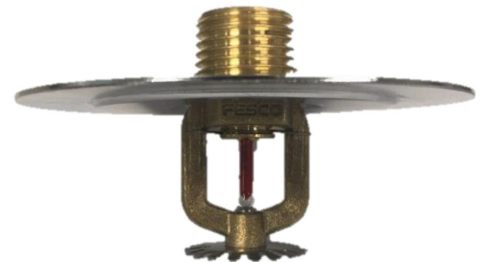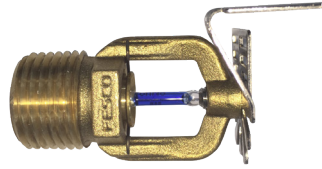
K5.6 Standard & In-Rack Sprinkler

■ Product availability

Type	Finish	Model No.	Certi.	57'C		68'C		79'C		93'C		141'C	
				SR	QR	SR	QR	SR	QR	SR	QR	SR	QR
Pendent	Brass	PI320/321	UL/FM	○	○	○	○	○	○	○	○	○	○
	Chrome		UL/FM	○	○	○	○	○	○	○	○	○	○
	White		UL/FM	○	○	○	○	○	○	○	○	○	○
	Tefron Coating		UL/FM	○	○	○	○	○	○	○	○	○	○
Upright	Brass	PI310/311	UL/FM	○	○	○	○	○	○	○	○	○	○
	Chrome		UL/FM	○	○	○	○	○	○	○	○	○	○
	White		UL/FM	○	○	○	○	○	○	○	○	○	○
Side-wall	Brass	PI340/341	UL/FM	○	○	○	○	○	○	○	○	○	○
	Chrome		UL/FM	○	○	○	○	○	○	○	○	○	○
	White		UL/FM	○	○	○	○	○	○	○	○	○	○

＊ K=5.6 1/2″ NPT or BSPT Thread, Glass bulb (5mm or 3mm dia. and 16mm length).

PI 410   PI 411   PI 420   PI 421

K8.0 Standard Sprinkler

The Paratech QR/SR Upright and Pendent Sprinklers are a compact, thermosensitive, glass-bulb spray sprinkler available in several different finishes, temperature ratings, and K-Factors to meet design requirements.

Type	Finish	Model No.	Certi.	57'C		68'C		79'C		93'C		141'C	
				SR	QR	SR	QR	SR	QR	SR	QR	SR	QR
Pendent	Brass	PI420/421	UL	○	○	○	○	○	○	○	○		○
	Chrome		UL	○	○	○	○	○	○	○	○		○
	White		UL	○	○	○	○	○	○	○	○		○
	Tefron Coating		UL	○	○	○	○	○	○	○	○	X	○
Upright	Brass	PI410/411	UL	○	○	○	○	○	○	○	○		○
	Chrome		UL	○	○	○	○	○	○	○	○		○
	White		UL	○	○	○	○	○	○	○	○		○
	Tefron Coating		UL	○	○	○	○	○	○	○	○		○

＊ K=8.0 or K=114, 3/4" NPT or BSPT Thread for PI420/421, PI410/411

PI 510

K11.2 CMDA Sprinkler

The Paratech has developed new CMDA (Control Mode/Density Area) QR/SR Upright and Pendent Sprinklers are available in several different finishes and temperature ratings to meet design requirements.

Type	Finish	Model No.	Certi.	57'C		68'C		79'C		93'C		141'C	
				SR	QR	SR	QR	SR	QR	SR	QR	SR	QR
Pendent	Brass	PI520/521	KFI	○	○	○	○	○	○	○	○	○	○
	Chrome		KFI	○	○	○	○	○	○	○	○	○	○
	White		KFI	○	○	○	○	○	○	○	○	○	○
	Tefron Coating		KFI	○	○	○	○	○	○	○	○	○	○
Upright	Brass	PI510/511	KFI	○	○	○	○	○	○	○	○	○	○
	Chrome		KFI	○	○	○	○	○	○	○	○	○	○
	White		KFI	○	○	○	○	○	○	○	○	○	○
	Tefron Coating		KFI	○	○	○	○	○	○	○	○	○	○

* K=11.2 or K=160, 3/4" NPT or BSPT Thread for PI520/521, PI510/511

Concealed Type

■ Cover Plate Color

* Color of cover plate Can be custom ordered

Concealed Sprinklers

■ Product availability

Type	Finish	Model No.	Certi.	68'C		93'C	
				SR	QR	SR	QR
Pedent	Brass	PI820/821	UL	○	○	○	○
	Chrome		UL	○	○	○	○
	White		UL	○	○	○	○

PI 720
SR

PI 721
QR

Flush Type Sprinklers

■ Product availability

Type	Finish	Model No.	Certi.	72'C		105'C	
				SR	QR	SR	QR
Pedent	Chrome	PI720/721	UL	○	○	○	–

* K=5.6 or K=80, 1/2" NPT or BSPT Thread for other models.

FH 751E
SR

FH 752E
QR

FH 731/732E
QR

Flush Type Sprinklers

Type	Finish	Model No.	Certi.	72'C		105'C	
				SR	QR	SR	QR
Pedent	Chrome	FH751/752EQR	KFI	○	○	○	○
		FH731/732EQR	KFI		○		○

Pedent Type

Upright Type

Side Wall Horizontal

Side Wall Vertical

Fusible Type Sprinklers

■ Product availability

Type	Finish	Model No.	Certi.	72'C	105'C	141'C	183'C
				SR	SR	SR	SR
Pendent	Brass	FH121G/122G/123G	KFI	○	○	○	○
Upright		FH111G/112G/113G	KFI	○	○	○	○

Type	Finish	Model No.	Certi.	72'C	105'C
				SR	SR
Side Wall	Brass	FH131G/132G/231T/232T	KFI	○	○
Vertical		FH141G/142G/241T/242T	KFI	○	○

∗ K=5.6 or K=80, 1/2″ NPT or BSPT Thread

FM APPROVED

Certificate of Compliance
This certificate is issued for the following equipment:

Automatic Control Mode Sprinklers for Fire Protection

Model	K	Type	Resp.	Element	NPT (in.)	Finishes	Temperature Ratings °F (°C)
PI310	5.6	Upright	SR	5 mm	1/2	Brass, Chrome, Polyester, Black Teflon	135, 155, 175, 200, 286 (57, 68, 79, 93, 141)
PI311	5.6	Upright	QR	3 mm	1/2	Brass, Chrome, Polyester, Black Teflon	135, 155, 175, 200, 286 (57, 68, 79, 93, 141)

Prepared for: PARATECH Co., Ltd., 30-21, Giljo-ro 425beon-gil, Wonmi-gu, Bucheon-si, Gyeonggi-do, Republic of Korea

Manufacturing Location: PARATECH Co., Ltd., 65-2 Choonui-Dong, Wonmi-ku, Bucheon-si, Kyunggi-do, Republic of Korea

FM Approvals Class: 2016
FM Approval Standard: Class Series 2000 (March 2006)

Approval Identification: 3056126   Approval Granted: February 12, 2018

To verify the availability of the Approved product, please refer to www.approvalguide.com

Said Approval is subject to satisfactory field performance, continuing Surveillance Audits, and strict conformity to the constructions as shown in the Approval Guide, an online resource of FM Approvals.

David B. Fuller
VP, Manager – Fire Protection
FM Approvals
1151 Boston-Providence Turnpike
Norwood, MA 02062
USA

FM Approvals
Member of the FM Global Group

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Certificate of Compliance
is certificate is issued for the following equipment:

Automatic Control Mode Sprinklers for Fire Protection

Model	K	Type	Resp.	Element	NPT (in.)	Finishes	Temperature Ratings °F (°C)
PI320	5.6	Pendent	SR	5 mm	1/2	Brass, Chrome, Polyester, Black Teflon	135, 155, 175, 200, 286 (57, 68, 79, 93, 141)
PI321	5.6	Pendent	QR	3 mm	1/2	Brass, Chrome, Polyester, Black Teflon	135, 155, 175, 200, 286 (57, 68, 79, 93, 141)

Prepared for: PARATECH Co., Ltd., 30-21, Giljo-ro 425beon-gil, Wonmi-gu, Bucheon-si, Gyeonggi-do, Republic of Korea

Manufacturing Location: PARATECH Co., Ltd., 65-2 Choonui-Dong, Wonmi-ku, Bucheon-si, Kyunggi-do, Republic of Korea

FM Approvals Class: 2017
FM Approval Standard: Class Series 2000 (March 2006)

Approval Identification: 3056126   Approval Granted: February 12, 2018

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Model	K	Type	Resp.	Element	NPT (in.)	Finishes	Temperature Ratings °F (°C)
PI340	5.6	Horizontal Sidewall	SR	5 mm	1/2	Brass, Chrome, Polyester, Black Teflon	135, 155, 175, 200, 286 (57, 68, 79, 93, 141)
PI341	5.6	Horizontal Sidewall	QR	3 mm	1/2	Brass, Chrome, Polyester, Black Teflon	135, 155, 175, 200, 286 (57, 68, 79, 93, 141)

Prepared for: PARATECH Co., Ltd., 30-21, Giljo-ro 425beon-gil, Wonmi-gu, Bucheon-si, Gyeonggi-do, Republic of Korea

Manufacturing Location: PARATECH Co., Ltd., 65-2 Choonui-Dong, Wonmi-ku, Bucheon-si, Kyunggi-do, Republic of Korea

FM Approvals Class: 2012
FM Approval Standard: Class Series 2000 (March 2006)

Approval Identification: 3056126   Approval Granted: February 12, 2018

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Model	K	Type	Resp.	Element	NPT (in.)	Finishes	Temperature Ratings °F (°C)
PI310	5.6	In-Rack Upright	SR	5 mm	1/2	Brass, Chrome, Polyester, Black Teflon	135, 155, 175, 200, 286 (57, 68, 79, 93, 141)
PI311	5.6	In-Rack Upright	QR	3 mm	1/2	Brass, Chrome, Polyester, Black Teflon	135, 155, 175, 200, 286 (57, 68, 79, 93, 141)

Prepared for: PARATECH Co., Ltd., 30-21, Giljo-ro 425beon-gil, Wonmi-gu, Bucheon-si, Gyeonggi-do, Republic of Korea

Manufacturing Location: PARATECH Co., Ltd., 65-2 Choonui-Dong, Wonmi-ku, Bucheon-si, Kyunggi-do, Republic of Korea

FM Approvals Class: 2005
FM Approval Standard: Class Series 2000 (February 2018)

Approval Identification: 3063730   Approval Granted: April 2, 2018

To verify the availability of the Approved product, please refer to www.approvalguide.com

Said Approval is subject to satisfactory field performance, continuing Surveillance Audits, and strict conformity to the constructions as shown in the Approval Guide, an online resource of FM Approvals.

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Certificate of Compliance
his certificate is issued for the following equipment:

Automatic Control Mode Sprinklers for Fire Protection

Model	K	Type	Resp.	Element	NPT (in.)	Finishes	Temperature Ratings °F (°C)
PI320	5.6	In-Rack Pendent	SR	5 mm	1/2	Brass, Chrome, Polyester, Black Teflon	135, 155, 175, 200, 286 (57, 68, 79, 93, 141)
PI321	5.6	In-Rack Pendent	QR	3 mm	1/2	Brass, Chrome, Polyester, Black Teflon	135, 155, 175, 200, 286 (57, 68, 79, 93, 141)

Prepared for: PARATECH Co., Ltd., 30-21, Giljo-ro 425beon-gil, Wonmi-gu, Bucheon-si, Gyeonggi-do, Republic of Korea

Manufacturing Location: PARATECH Co., Ltd., 65-2 Choonui-Dong, Wonmi-ku, Bucheon-si, Kyunggi-do, Republic of Korea

FM Approvals Class: 2005
FM Approval Standard: Class Series 2000 (February 2018)

Approval Identification: 3063730   Approval Granted: April 2, 2018

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Norwood, MA 02062
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CERTIFICATE OF COMPLIANCE

Certificate Number   20121031-EX5991
Report Reference   EX5991-20121030
Issue Date   2012-OCTOBER-31

Issued to: PARADISE INDUSTRY CO LTD
PLANT 65-2 CHOONEUI-DONG
WOONMI-KU
BUCHEON-CITY KYUNGGI-DO KOREA

This is to certify that representative samples of   SPRINKLERS, AUTOMATIC AND OPEN
Automatic sprinklers, incorporating 3 mm and 5 mm frangible glass bulbs, PI820, PI821

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: ANSI/UL 199 - Automatic Sprinklers for Fire Protection Service
ULC/ORD-C199 - Automatic Sprinklers for Fire Protection Service

Additional Information: See the UL Online Certifications Directory at www.ul.com/database for additional information

Only those products bearing the UL Listing Mark for the US and Canada should be considered as being covered by UL's Listing and Follow-Up Service meeting the appropriate requirements for US and Canada.
The UL Listing Mark for the US and Canada generally includes: the UL in a circle symbol with "C" and "US" identifiers: the word "LISTED": a control number (may be alphanumeric) assigned by UL; and the product category name (product identifier) as indicated in the appropriate UL Directory.

Look for the UL Listing Mark on the product.

William R. Carney, Director, North American Certification Programs

UL-LLC
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CERTIFICATE OF COMPLIANCE

Certificate Number   20180306-EX5991
Report Reference   EX5991-20160419
Issue Date   2018-MARCH-06

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

Automatic sprinklers, incorporating 3 mm and 5 mm frangible glass bulbs in the following models, styles and temperature ratings:

SIN	Response Type	Type	K-Factor	Temperature Rating, °F
PI310	SR	Upright, Intermediate Level Upright	5.6	135,155,175,200,286
PI311	QR	Upright, Intermediate Level Upright	5.6	135,155,175,200,286
PI320	SR	Pendent, Intermediate Level Pendent	5.6	135,155,175,200,286
PI321	QR	Pendent, Intermediate Level Pendent	5.6	135,155,175,200,286
PI340	SR	Horizontal Sidewall	5.6	135,155,175,200,286
PI341	QR	Horizontal Sidewall	5.6	135,155,175,200,286
PI410	SR	Upright	8.0	135,155,175,200,286
PI411	QR	Upright	8.0	135,155,175,200,286
PI420	SR	Pendent	8.0	135,155,175,200
PI421	QR	Pendent	8.0	135,155,175,200,286

Bruce Mahrenholz, Director North American Certification Program

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CERTIFICATE OF COMPLIANCE

Certificate Number   20120327-EX5991
Report Reference   EX5991-20040715
Issue Date   2012-MARCH-27

Issued to: PARADISE INDUSTRY CO LTD
PLANT 65-2 CHOONEUI-DONG WOONMI-KU BUCHEON-CITY KYUNGGI-DO KR

This is to certify that representative samples of   RECESSED AND CONCEALED SPRINKLERS FLUSH

USL, CNL   Automatic sprinklers incorporating a fusible alloy type heat responsive element in the following models, styles and temperature ratings:

SIN	Response Type	Flush Style	System Working Pressure, psig	Coverage	Nominal K-Factor	Temperature Rating, °F (°C)
PI728	SR	Flush Pendent	175	Standard	5.6	162 (72), 321 (160)
PI721	QR	Flush Pendent	175	Standard	5.6	162 (72)

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: Automatic Sprinklers For Fire Protection Service, UL 199
Automatic Sprinklers for Fire Protection Service, ULC/ORD-C199

Additional Information: See the UL Online Certifications Directory at www.ul.com/database for additional information

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The UL Listing Mark for the US and Canada generally includes: the UL in a circle symbol with "C" and "US" identifiers: the word "LISTED": a control number (may be alphanumeric) assigned by UL; and the product category name (product identifier) as indicated in the appropriate UL Directory.

Look for the UL Listing Mark on the product.

William R. Carney, North American Certification Programs

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