

C O N T E N T S



COMMERCIAL  
INDUSTRIAL  
**DISPLAY**

Down Lights  
Spot Lights

ARCHITECTURAL  
EXTERNAL  
CONTROL GEARS



## DISPLAY



## DOWNLIGHT

FRATER Downlights are suitable for single or twin compact fluorescent lamp and HID Lamps.

**Application:** Suitable for offices, reception areas, corridors, hotel lobbies, shops and commercial areas. The Low height version is specially made compatible where there is restriction of height between ceilings & the roof or ducting.

**Material & Finish:**

**Housing:** CRCA sheet steel reinforced structure finished with off-white powder coating in satin finish. Adjustable stainless steel brackets are provided for easy installation & suitable for all applications.

**Trim:** Off white powder coated sheet steel trim.

**Reflector:** High purity spun aluminium with vacuum metalized coating to provide a high lighting output.

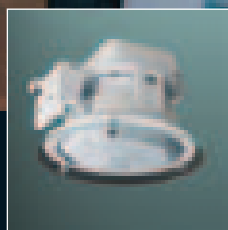
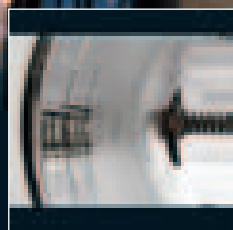
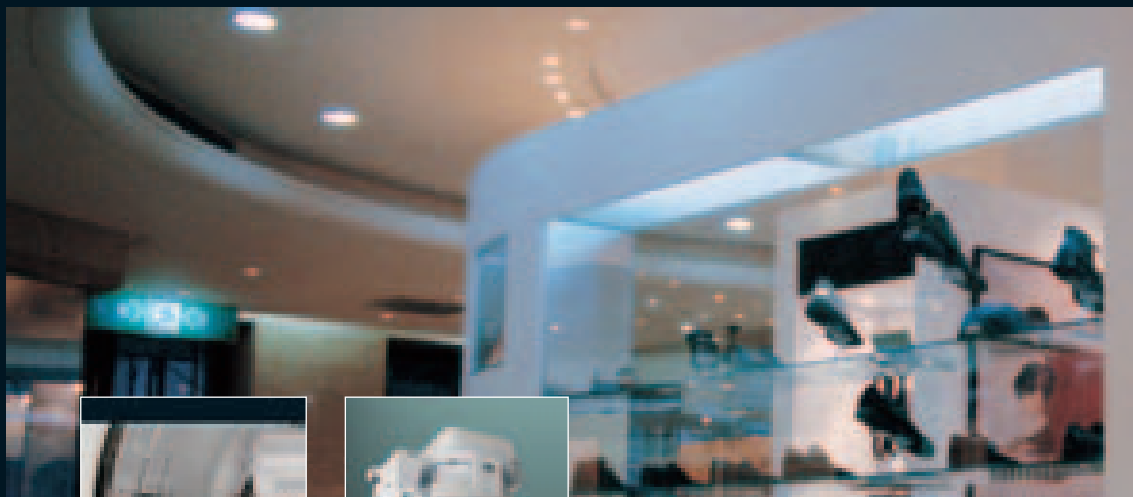
**Lamp holders:** Flame-retardant Polycarbonate plastic with phosphor bronze contacts for CFL lamps and porcelain holders for HID lamps.

**Internal Wiring:** With PVC insulated, heat resistant (105°C) single strand Copper wire.

**Ballast:** Energy efficient electromagnetic ballast, with Low energy loss, noiseless operation, low operating temperatures & minimum temperature rise.

# RECESSED DOWNLIGHT

FRDL - STD SERIES

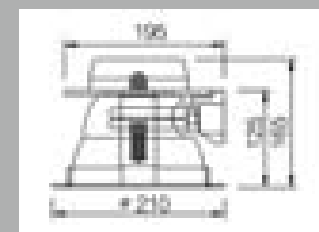
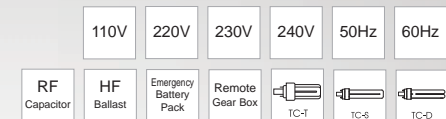


Model	Lamps	Lamp holder
FRDL 113 STD	1XTC-D 10W / 13W	G 24
FRDL 118 STD	1XTC-D 18W	G 24
FRDL 126 STD	1XTC-D 26W	G 24
FRDL 209 STD	2XTC-S 7W / 9W	G 23
FRDL 213 STD	2XTC-D 10W / 13W	G 24
FRDL 218 STD	2XTC-D 18W	G 24
FRDL 226 STD	2XTC-D 26W	G 24
FRDL 232 STD	2XTC-TEL 26W / 32W	GX24

FRATER®

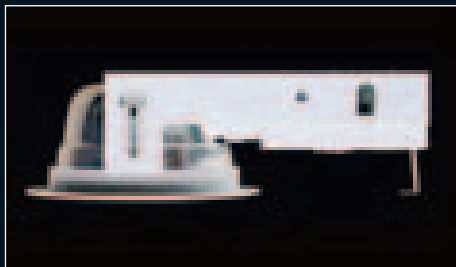


OPTIONS



# RECESSED DOWNLIGHT

FRDL - LH SERIES

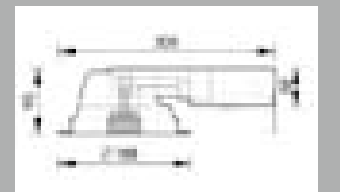
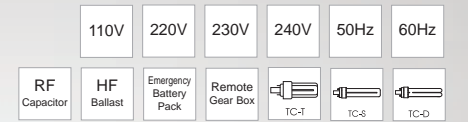


Model	Lamps	Lamp holder
FRDL 109 LH	1XTC-S 7W / 9W	G 23
FRDL 113 LH	1XTC-D 10W / 13W	G 24
FRDL 118 LH	1XTC-D 18W	G 24
FRDL 126 LH	1XTC-D 26W	G 24
FRDL 209 LH	2XTC-S 7W / 9W	G 23
FRDL 213 LH	2XTC-D 10W / 13W	G 24
FRDL 218 LH	2XTC-D 18W	G 24

FRATER®



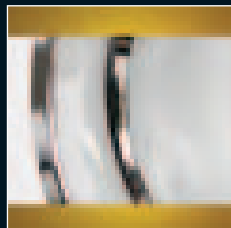
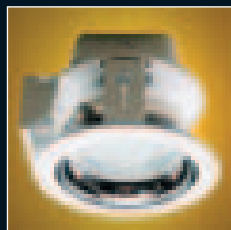
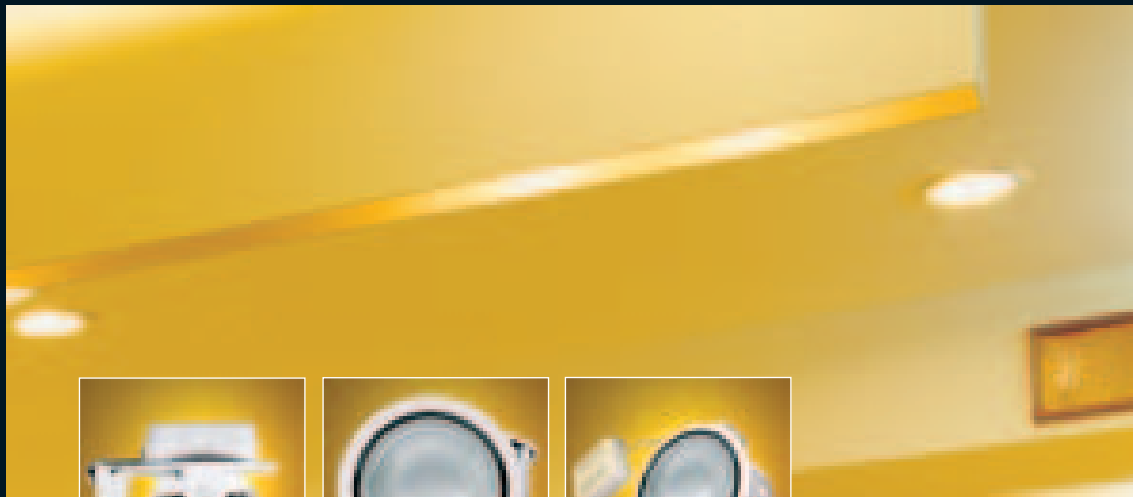
OPTIONS



This luminaire is specifically applicable where height is a restriction.

# RECESSED DOWNLIGHT

FRDL - VITA 1 SERIES

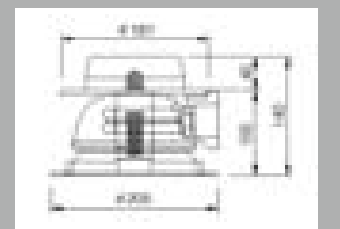
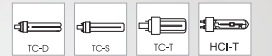


Model	Lamps	Lamp holder
FRDL 170 VITA1	1XHCI-T 70	G 12
FRDL 170 VITA1	1XHCI-TS 70	Rx7s
FRDL 109 VITA1	1XTC-S 7W / 9W	G 23
FRDL 113 VITA1	1XTC-D 10W / 13W	G 24
FRDL 118 VITA1	1XTC-D 18W	G 24
FRDL 126 VITA1	1XTC-D 26W	G 24
FRDL 209 VITA1	2XTC-S 7W / 9W	G 23
FRDL 213 VITA1	2XTC-D 10W / 13W	G 24
FRDL 218 VITA1	2XTC-D 18W	G 24
FRDL 226 VITA1	2XTC-D 26W	G 24

FRATER



OPTIONS



The downlight achieves IP54 with glass diffuser (clear or frosted) in CFL version & IP44 with metal halide lamps that comes with remote gearbox (Class II).

# RECESSED DOWNLIGHT

FRDL - VITA 2 SERIES

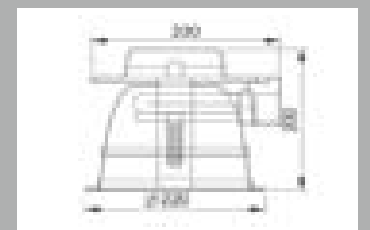


Model	Lamps	Lamp holder
FRDL 70/150 VITA 2	1XHCI-T 70W / 150W	G 12
FRDL 170 VITA 2	1XHCI-TS 70W	RX7S
FRDL 150 VITA 2	1XHCI-TS 150W	RX7S
FRDL 232 VITA 2	2XTC- TEL 32 W	GX24

FRATER



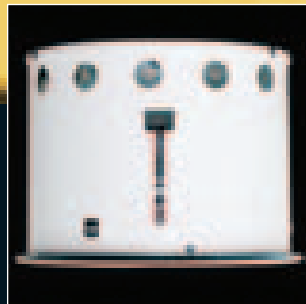
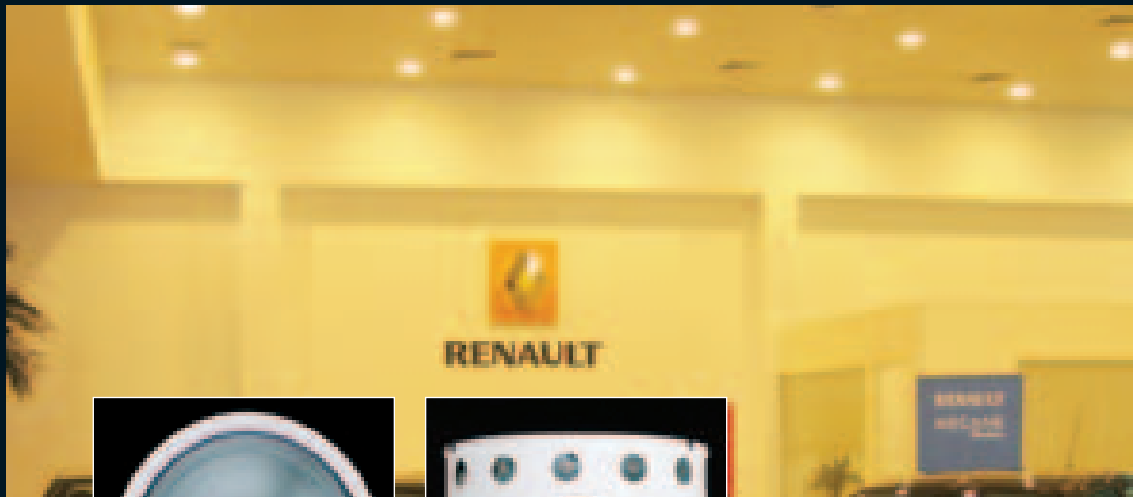
OPTIONS



The downlight achieves IP54 with glass diffuser (clear or frosted) in CFL version & IP44 with metal halide lamps that comes with remote gearbox (Class II).

# RECESSED DOWNLIGHT

FRDL - VITA 2 - HID SERIES

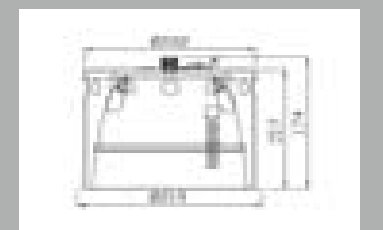


Model	Lamps	Lamp holder
FRDL 170 VITA 2H	1XHCI-TS 70W	RX7S
FRDL 1150 VITA 2H	1XHCI-TS 150W	RX7S

FRATER

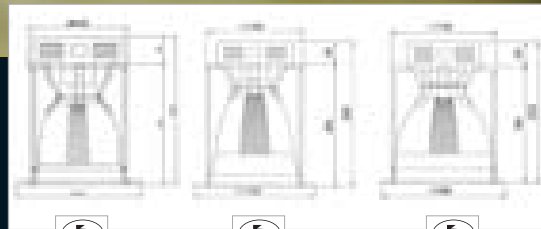
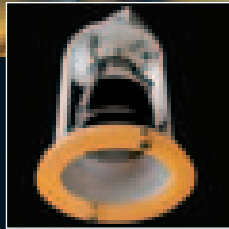
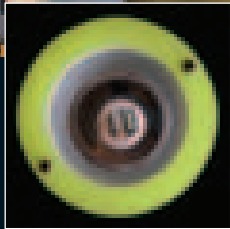
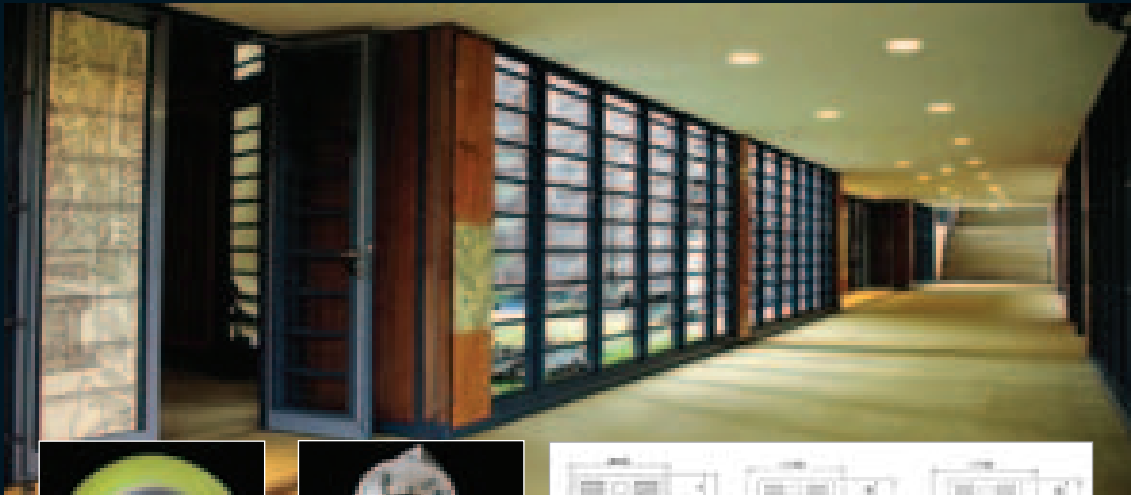


OPTIONS



# RECESSED DOWNLIGHT

FRDL - INDUS SERIES



INDUS 1



INDUS 2



INDUS 3

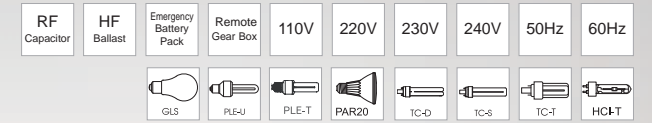


Model	Lamps	Lamp holder
FRDL 1X70/150 INDUS	1XHCI-T 70 / 150W	G 12
FRDL 109 INDUS	1XTC-S 7W / 9W	G 23
FRDL 113 INDUS	1XTC-D 10W / 13W	G 24
FRDL 118 INDUS	1XTC-D 18W	G 24
FRDL 100 INDUS	1XP/30 /100W	E27
FRDL 100 INDUS	PLUE 20W	E27
FRDL 100 INDUS	PLET 23W	E27
FRDL 100 INDUS	PAR20 50W	E27

FRATER



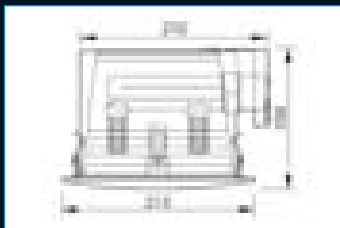
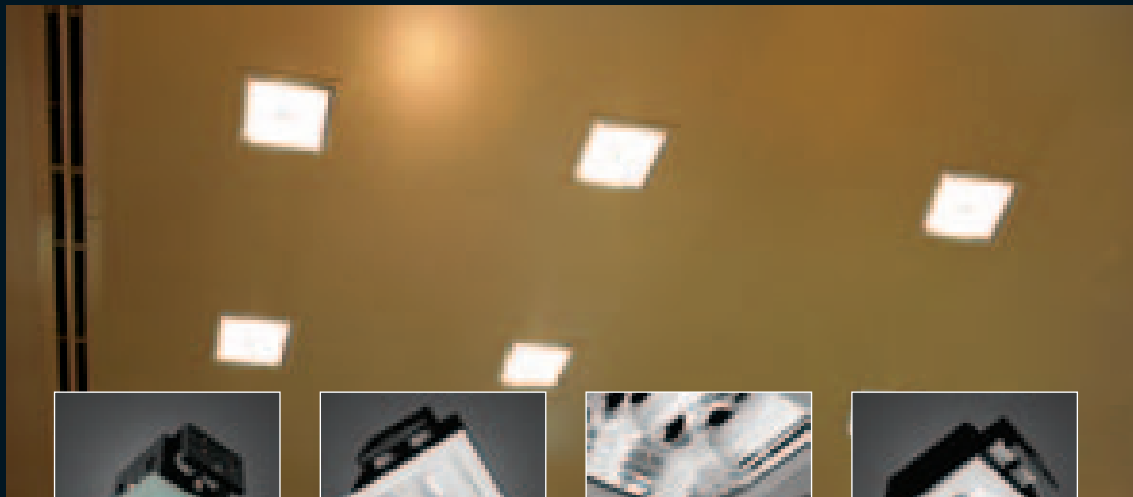
OPTIONS



The Indus vertical downlights come in a variety of diameters from 147 to 188 mm, and is ideal for compact fluorescent lamps or vertical metal halide lamps. The luminaire is also available with optional floating decorative attachment such as frosted safety glass disc, frosted acrylic ring in fluorescent green, Marble green & fluorescent orange.

# RECESSED DOWNLIGHT

FRDL - CUBE SERIES

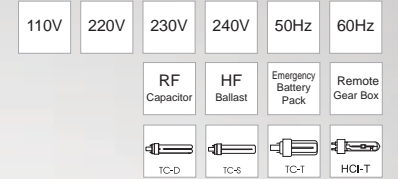


Model	Lamps	Lamp holder
FRDL 1X70/150 CUBE	1XHCI-T 70 / 150W	G 12
FRDL 213 CUBE	2XTC-D 10W / 13W	G 24
FRDL 218 CUBE	2XTC-D 18W	G 24
FRDL 226 CUBE	2XTC-D 26W	G 24
FRDL 218 CUBE	2XTC-TEL 18W	GX24
FRDL 226 CUBE	2XTC-TEL 26W	GX24
FRDL 232 CUBE	2XTC-TEL 32W	GX24
FRDL 242 CUBE	2XTC-TEL 42W	GX24

FRATER®



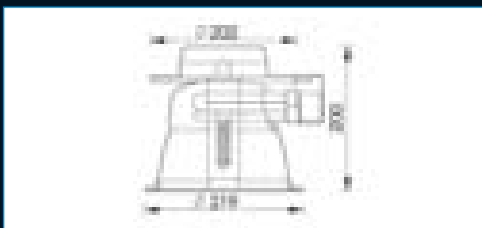
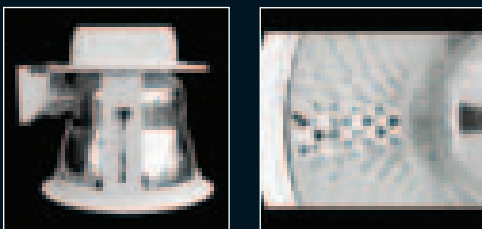
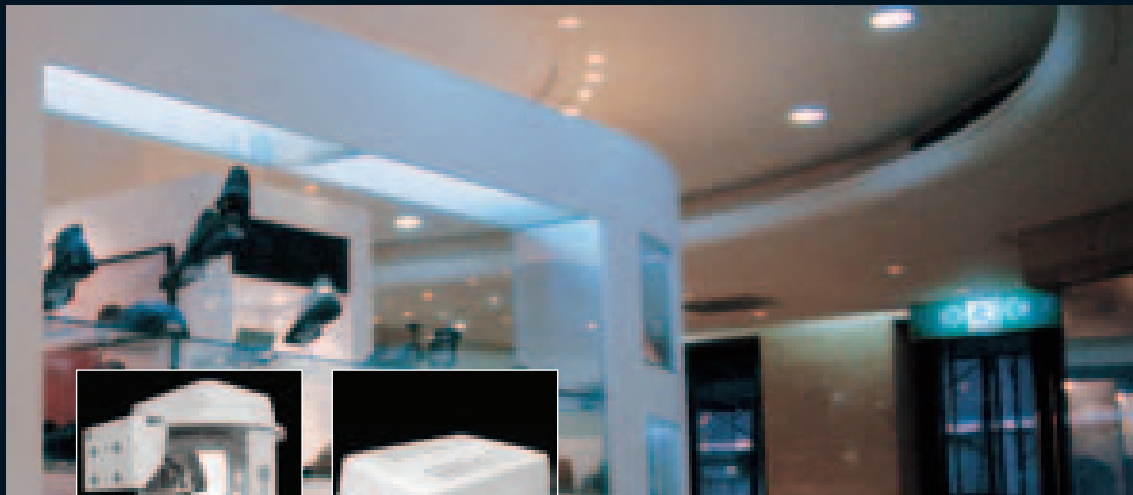
OPTIONS



The square shaped, recessed downlight for compact fluorescent lamps has a high total reflectance square aluminium reflector. The CUBE can be fitted with energy-efficient TC-D lamps or with high lumen output TC-T lamps. This luminaire can accommodate the following optional attachments such as floating decorative clear square glass, decorative frosted square glass, decorative clear square acrylic, decorative frosted square acrylic and remote gear box.

# RECESSED DOWNLIGHT

## FRDL - POLAR SERIES

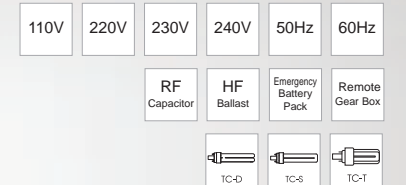


Model	Lamps	Lamp holder
FRDL 118 POLAR	1XTC-D 18W	G24d2
FRDL 126 POLAR	1XTC-D 26W	G24d3
FRDL 132 POLAR	1XTC-TEL 32W	G24q3
FRDL 142 POLAR	1XTC-TEL 42W	G24q4
FRDL 213 POLAR	2XTC-D 10/13W	G 24d1
FRDL 218 POLAR	2XTC-D 18W	G 24d2
FRDL 226 POLAR	2XTC-D 26W	G 24d3
FRDL 232 POLAR	2XTC-TEL 32W	GX 24q3

FRATER



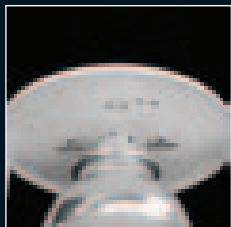
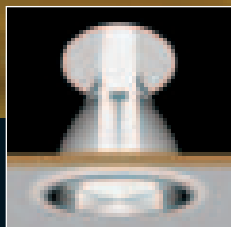
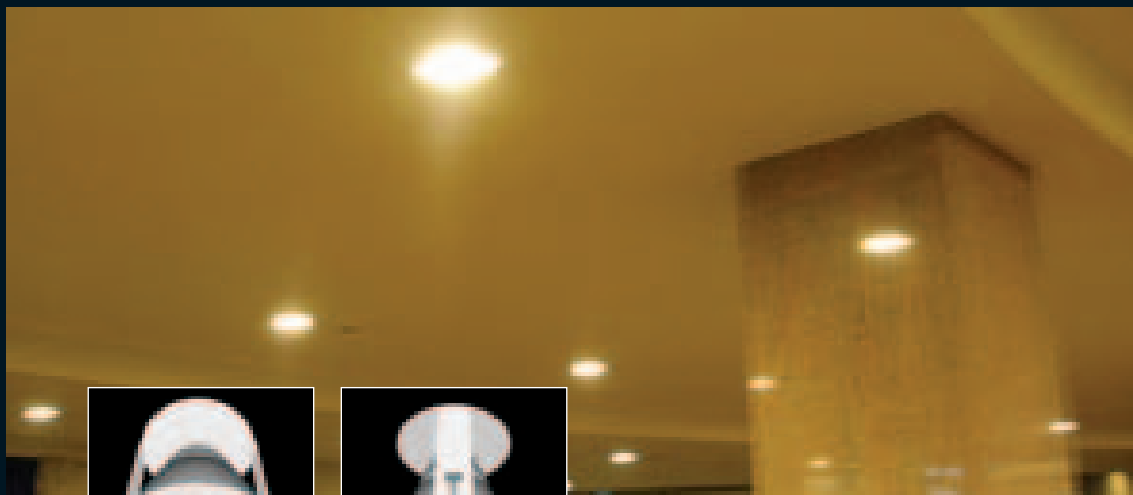
OPTIONS



The polar series of downlights that conforms to LG3 CAT2 compliance is used with compact fluorescent lamps. The luminaire is also available with optional floating decorative attachment such as frosted/clear safety glass disc, frosted /clear acrylic ring in fluorescent green, Marble green & fluorescent orange.

# RECESSED DOWNLIGHT

FRDL - ROLTA SERIES

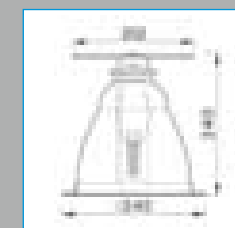
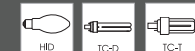


Model	Lamps	Lamp holder
FRDL HID ROLTA	Elliptical HID	5KV E27
FRDL 118 ROLTA	1XTC-D 18W	G24d2
FRDL 126 ROLTA	1XTC-D 26W	G24d3
FRDL 132 ROLTA	1XTC-TEL 32W	G24q3
FRDL 142 ROLTA	1XTC-TEL 42W	G24q4

FRATER®



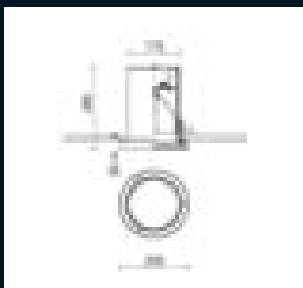
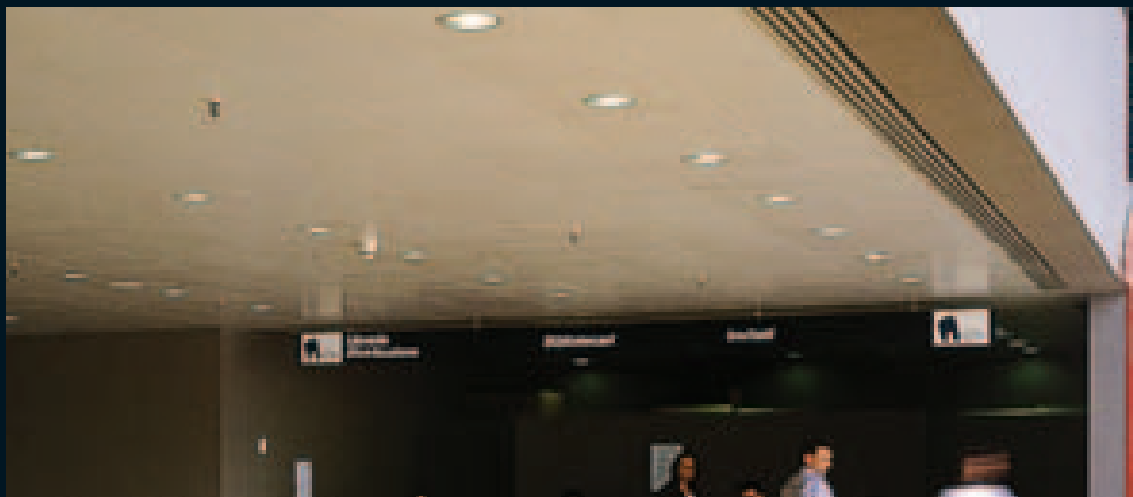
OPTIONS



The luminaire has got an optional attachment such as detachable aluminium turbo cross louvre for better glare control.

# RECESSED DOWNLIGHT

FRDL - BRIGHT SERIES



colours available

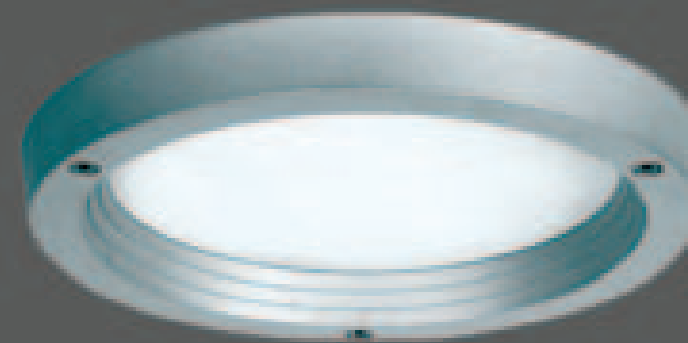
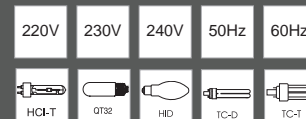


Model	Lamps	Lamp Holder
FRDL 100 BRIGHT 01	1X100W QT32	E 27
FRDL 126 BRIGHT 01	1XTC-D 26W	G24d3
FRDL 142 BRIGHT 01	1XTC-TEL 42W	G24q4
FRDL 180 BRIGHT 01	1X80W HME	E 27
FRDL 170 BRIGHT 01	1X70W HSE	E 27
FRDL 170 BRIGHT 01	1X70W HIE	E 27
FRDL 170 BRIGHT 01	1X70W HIT	G 12

FRATER®

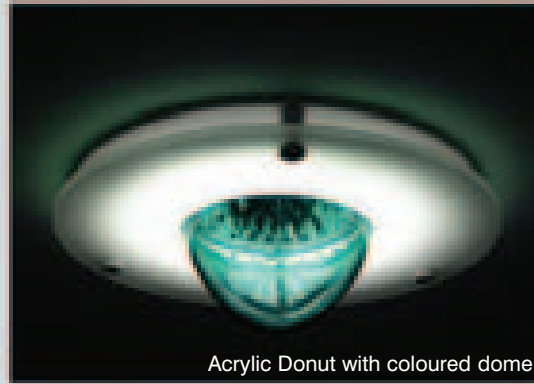
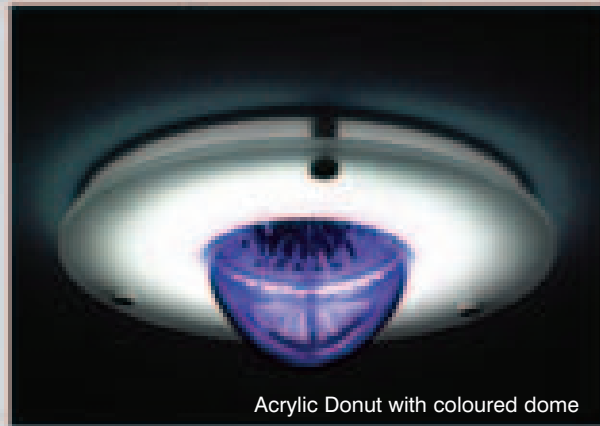


OPTIONS

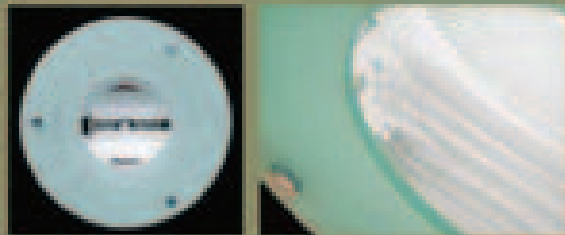


Bright 01

# DOWN LIGHT OPTIONS



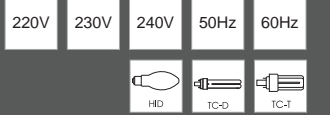
# DOWN LIGHT OPTIONS



FRATER®



OPTIONS



# SURFACE DOWNLIGHT

FRDL - EDISON SERIES

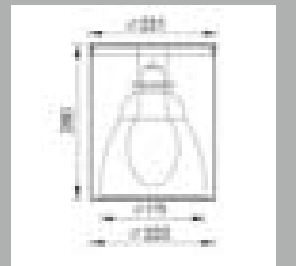


IP44

colours available



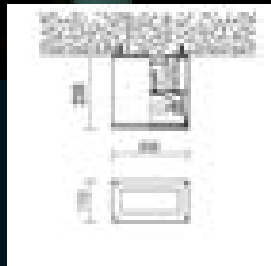
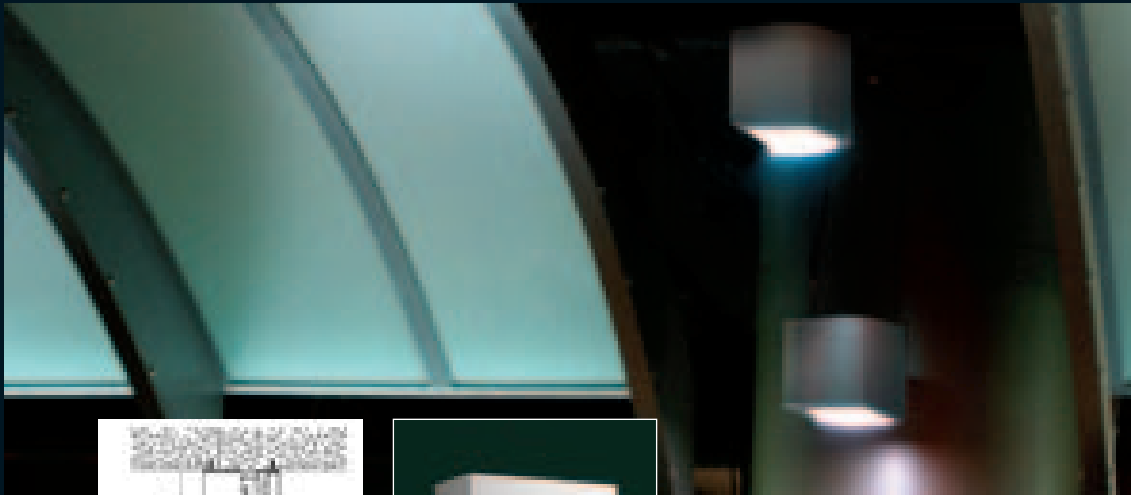
Model	Lamps	Lamp holder
FRDL 113 EDISION	1XTC-D 13W	G 24
FRDL 118 EDISION	1XTC-D 18W	G 24
FRDL 126 EDISION	1XTC-D 26W	G 24
FRDL 132 EDISION	1XTC-TEL 32W	GX24
FRDL 142 EDISION	1XTC-TEL 42W	GX24
FRDL 213 EDISION	2XTC-D 13W	G 24
FRDL 218 EDISION	2XTC-TEL 18W	GX24
FRDL 226 EDISION	2XTC-TEL 26W	GX24



A vertical downlight with sandblasted and anodised aluminium reflector for high ceiling areas, medium lumen output HID lamps or TC-TEL lamps. The luminaire is also available with horizontal lamp and glass to achieve IP44.

# SURFACE DOWN LIGHTING

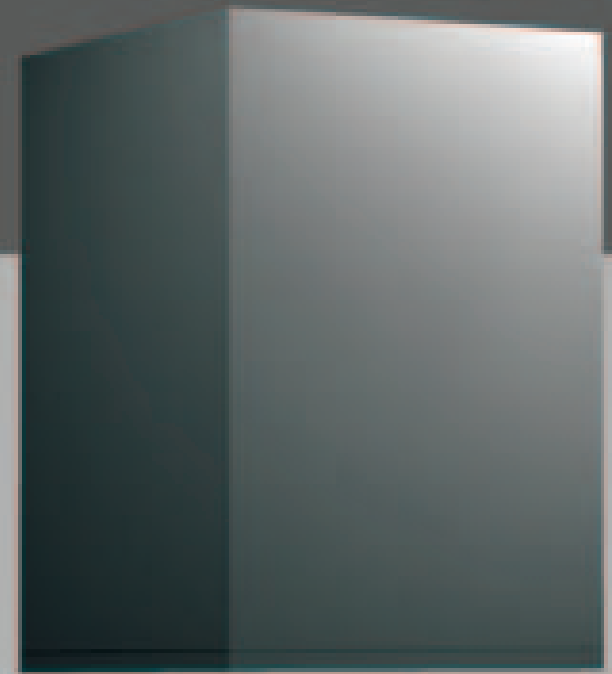
## FRDL - CLASSIC SERIES



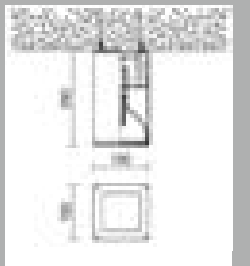
colours available



Model	Lamps	Lamp holder
FRDL CLASSIC 101	1X150W QT-DE12	R7s
FRDL CLASSIC 101	1X70W HIT-DE12	Rx7s
FRDL CLASSIC 102	75W PAR 30	E27
FRDL CLASSIC 102	70W HCI-T	G12

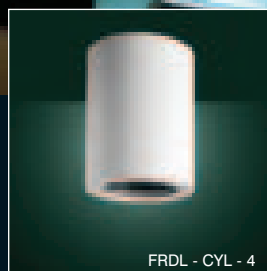
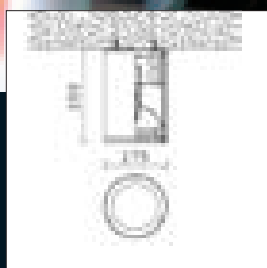


FRDL - Classic 102



# SURFACE DOWN LIGHTING

## FRDL - CYLINDER SERIES



FRDL - CYL - 4

colours available

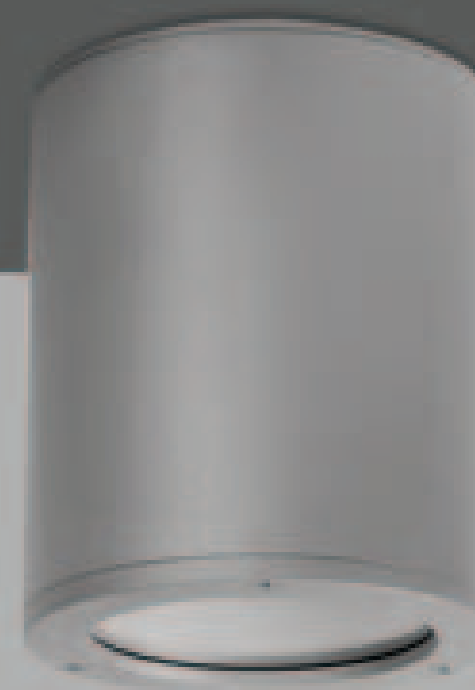
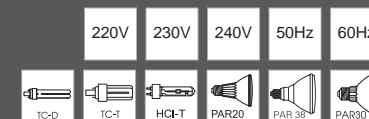


Model	Lamps	Lamp holder
FRDL CYL 4	1XTC-D 26W	G24d-3
FRDL CYL 4	1XTC-TEL 26W	G24q-4
FRDL CYL 4	1XHCI-T 35 / 70W	G12

FRATER®

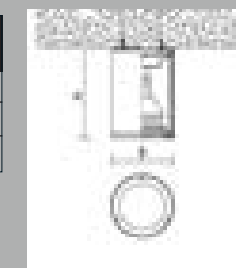


OPTIONS



FRDL CYL - 1/2/3

Model	Lamp	Lamp holder	A	B
FRDL CYL 1	PAR20 50W	E27	135	105
FRDL CYL 2	PAR30 75W	E27	180	140
FRDL CYL 3	PAR38 100W	E27	220	175



The surface downlight is available in extruded aluminium housing, die-cast aluminium frame, clear tempered glass and high purity aluminium reflector.

# SURFACE DOWNLIGHT

## FRDL - DURA SERIES



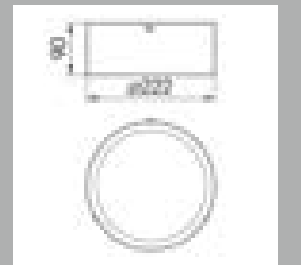
colours available



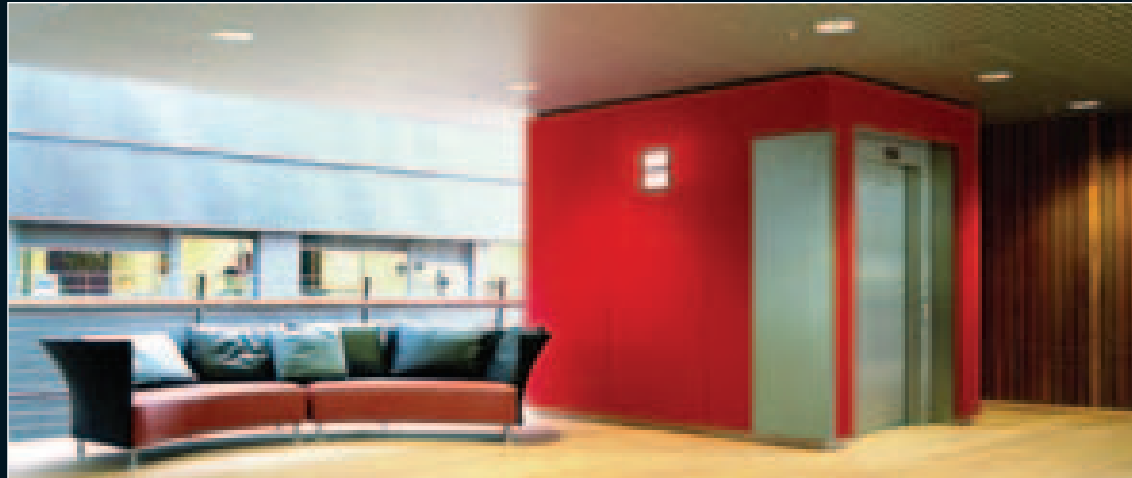
Model	Lamps	Lamp holder
FRDL 118 DURA	1XTC-D 18W	G24
FRDL 126 DURA	1XTC-D 26W	G24
FRDL 132 DURA	1XTC-T 32W	G24
FRDL 213 DURA	2XTC-D 13W	G24
FRDL 218 DURA	2XTC-D 18W	G24
FRDL 226 DURA	2XTC-D 26W	G24



FRDL DURA



A surface mounted downlight in CRCA pretreated powder coated housing with acrylic diffuser or clear frosted glass.



# DISPLAY

## SPOT LIGHT

FRATER FRSL "CUTE" series are applicable in offices, gangways, hotels & auditoriums.

**Material & Finish:**

**Housing:** FRSL CUTE 11/12/13 comes with sheet steel where as others are made of cast aluminium, pretreated & powder coated with wide range of colours that includes white, chrome, brass & satin. The ceiling trim gets flushed with the ceiling due to the presence of stainless steel spring. The luminaire can be used with MR 16 halogen lamps that can be operated by LV transformer.



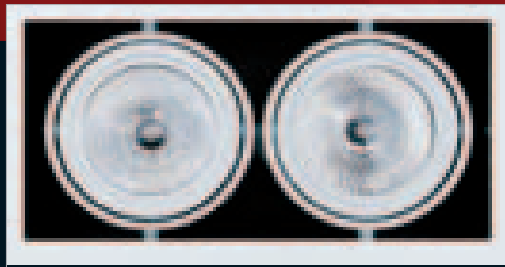
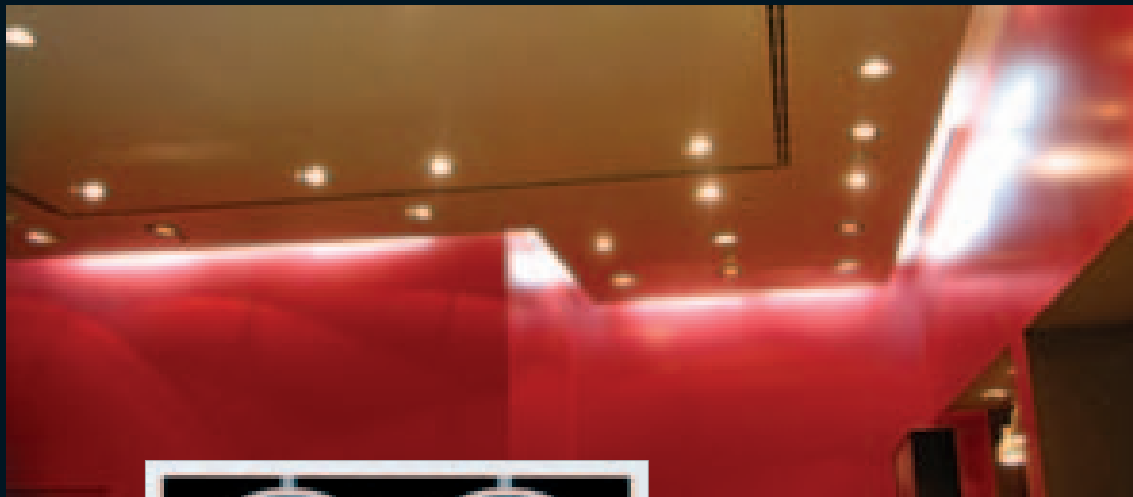
FRATER FRSL series are applicable in showrooms and art galleries to provide prime focus on the items on display.

**Material & Finish:**

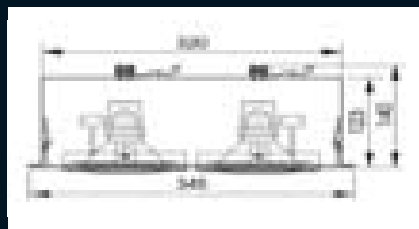
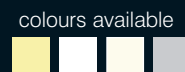
**Housing:** Made of CRCA sheet steel, pretreated & powder coated with black colour. The ceiling trim along with modern style lamp ring offers elegant and contemporary look to these luminaire. These series are suitable for use with low voltage halogen AR 111, MR 16 & Mains Voltage PAR 30 Lamps. The Luminaire is available in a wide range from Single to Quatro lamp versions. The main features of this series are the high light output with fixed / rotatable lamp bracket & adjustable beam direction for symmetric and assymmetric light distribution. The Focus series can be used as wall-washer & directional downlight in which the aluminium reflector is with high efficient sandblast & anodization for High Luminous Intensities and better glare control with adjustable beam direction. The beam direction in luminaires with AR 111 can be adjusted by swiveling the lamp ring & the lamp ring's arm also can be pulled up or down for various beam coverage.

# SPOT LIGHT

## FRSL - ULTRA SERIES



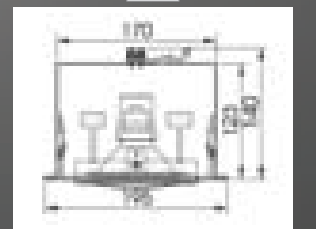
Model	Lamp	Lamp holder
FRSL ULTRA 2	2XPAR 30 100W max.	E 27



FRATER®



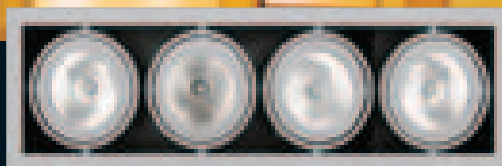
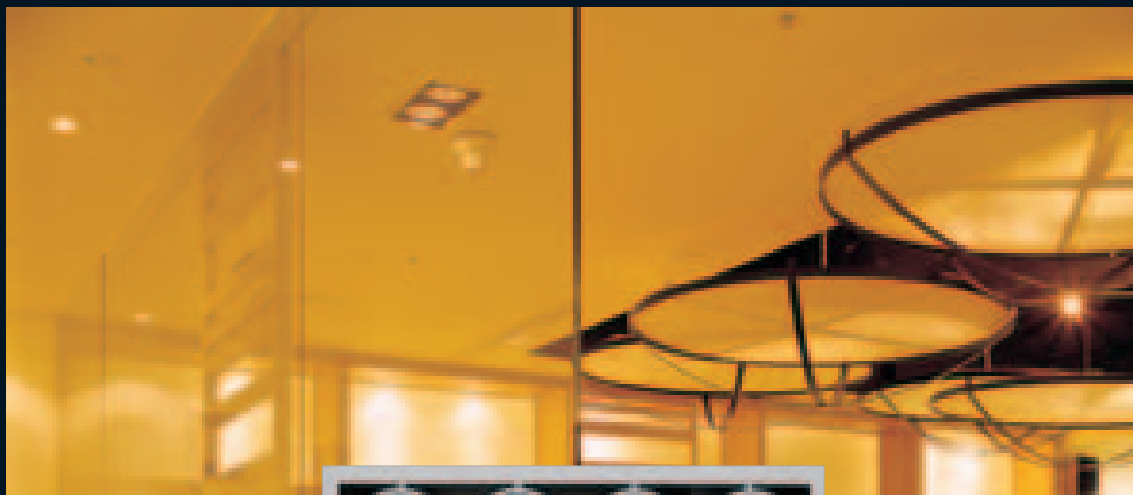
OPTIONS



Model	Lamp	Lamp holder
FRSL ULTRA 1	1XPAR 30 100W max.	E 27

# SPOT LIGHT

FRSL - ULTRA SERIES



Model	Lamp	Lamp holder
FRSL ULTRA 4	4XPAR 30 100W max.	E 27



colours available



FRATER



OPTIONS

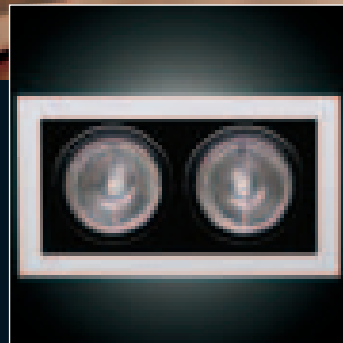
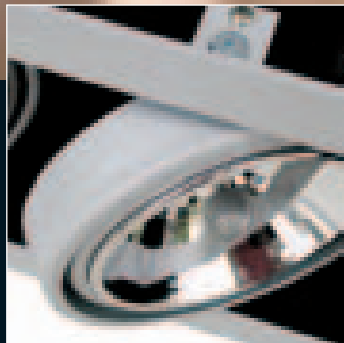
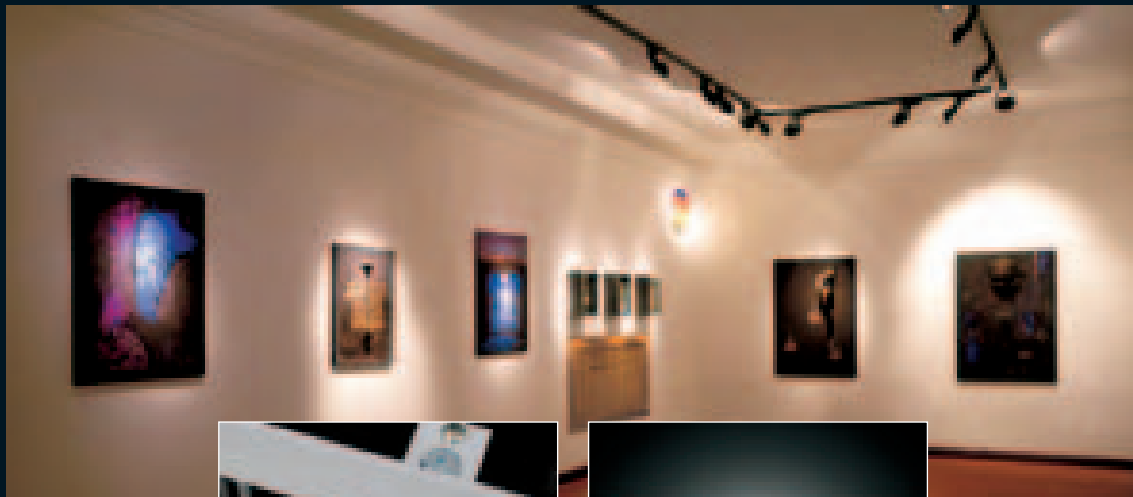


Model	Lamp	Lamp holder
FRSL ULTRA 3	3XPAR 30 100W max.	E 27

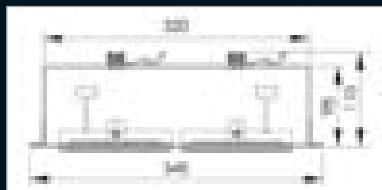


# SPOT LIGHT

FRSL - ASTRA SERIES



Model	Lamp	Lamp holder
FRSL ASTRA 2	2 X AR111 12V 100W max.	G53



colours available



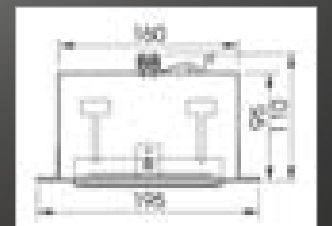
FRATER



OPTIONS



Model	Lamp	Lamp holder
FRSL ASTRA 1	1 X AR111 12V 100W max.	G53



# SPOT LIGHT

FRSL - ASTRA SERIES



Model	Lamp	Lamp holder
FRSL ASTRA 4	4 X AR111 12V 100W max.	G53



colours available



FRATER



OPTIONS

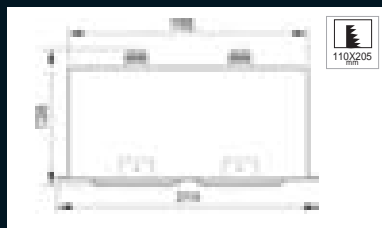


Model	Lamp	Lamp holder
FRSL ASTRA 3	3 X AR111 12V 100W max.	G53



# SPOT LIGHTS

FRSL - SPECTRA SERIES



colours available

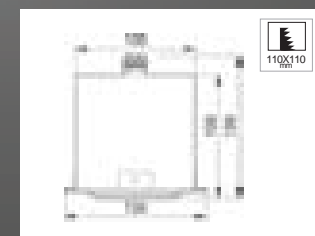


Model	Lamp	Lamp holder
FRSL SPECTRA 1	1 X MR 16 12V 50W max.	GX 5.3
FRSL SPECTRA 2	2 X MR 16 12V 50W max.	GX 5.3

FRATER®

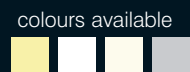
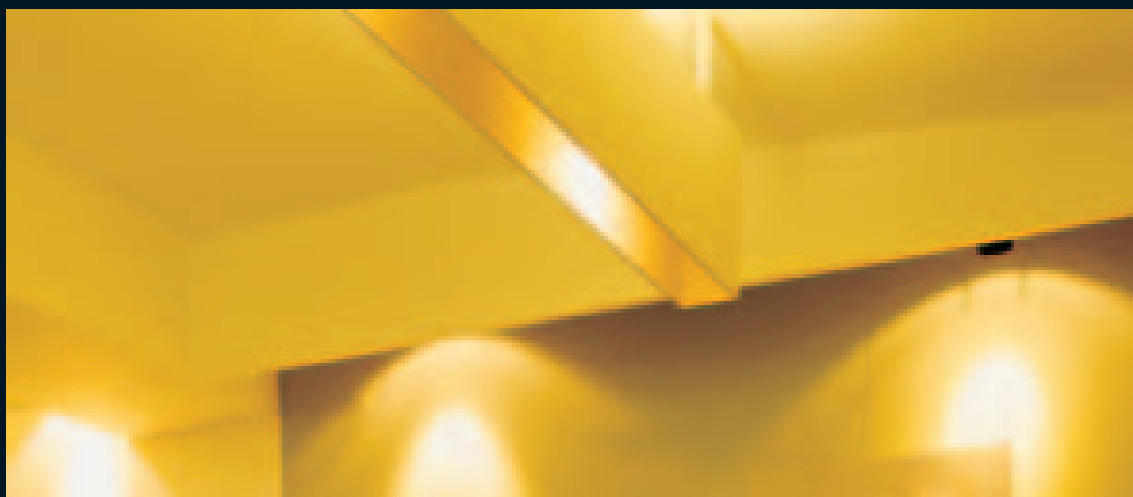


OPTIONS



# SPOT LIGHTS

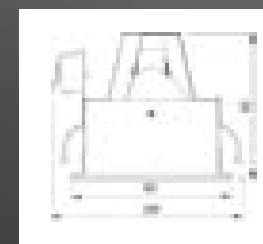
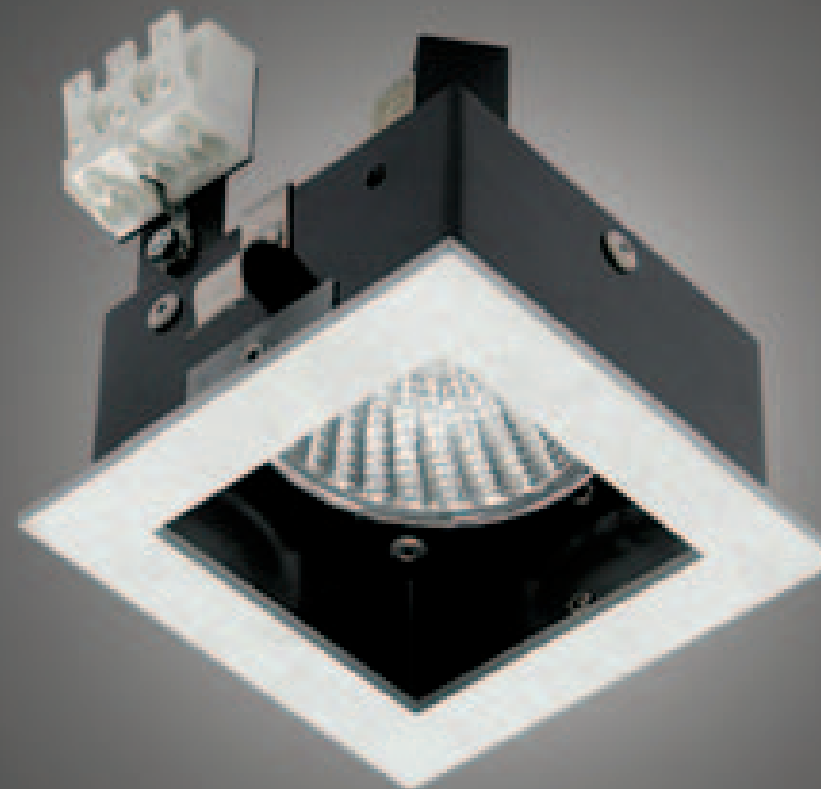
## FRSL - GAMA SERIES



FRATER®



OPTIONS

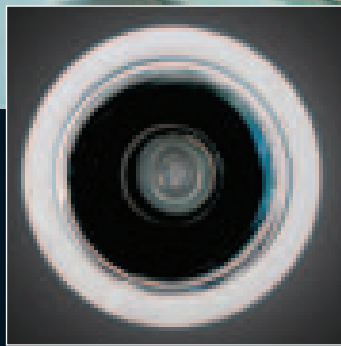


Compact size, square shape, low voltage halogen MR16, 12V max. 50W, recessed adjustable or fixed downlight provides various beam angles. For the adjustable version, the beam direction can be adjusted by swiveling the lamp bracket. 12V transformer required for this luminaire

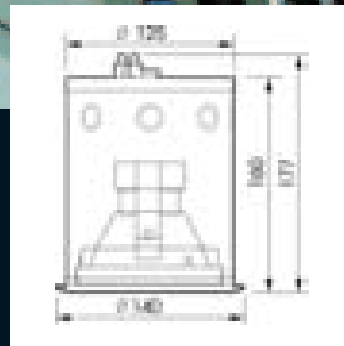
Model	Lamp	Lamp holder
FRSL GAMA	1XMR 16 12V 50W max.	E 27

# SPOT LIGHT

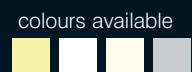
FRSL - FOCUS SERIES



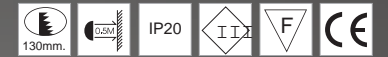
FRSL FOCUS 1



Model	Lamp	Lamp holder
FRSL FOCUS 1	1XMR16 12V 50W max.	GX 5.3
FRSL FOCUS 2	1XMR16 12V 50W max.	GX 5.3



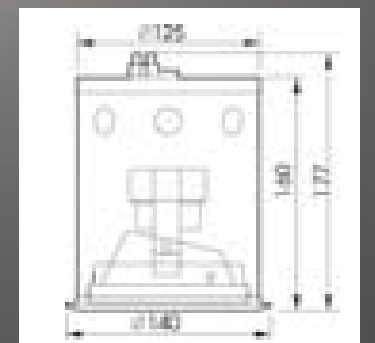
FRATER®



OPTIONS

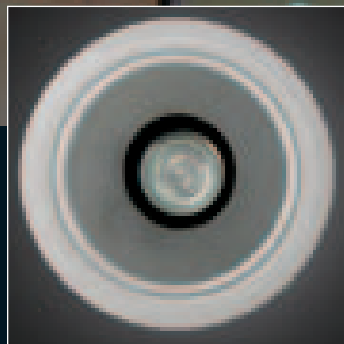
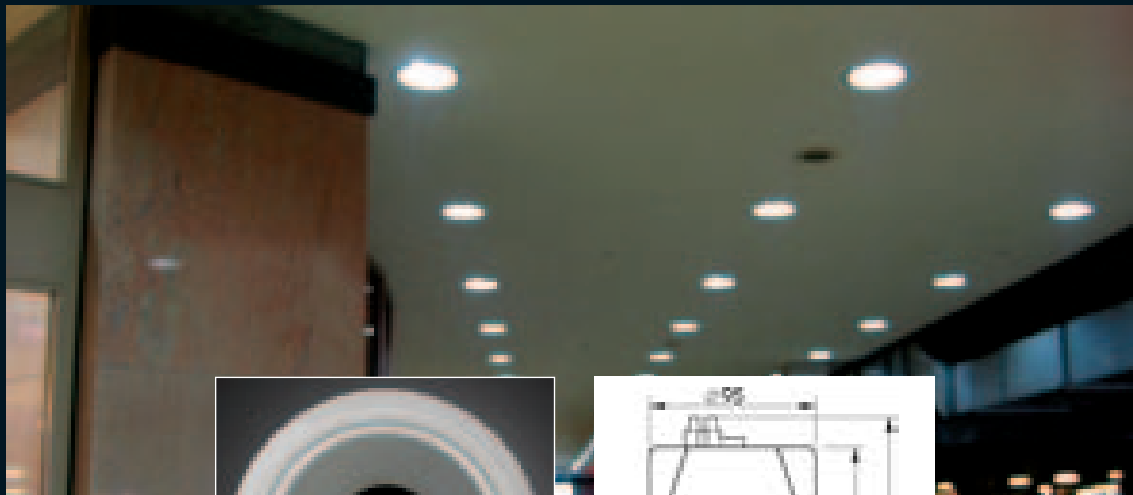


FRSL FOCUS 2

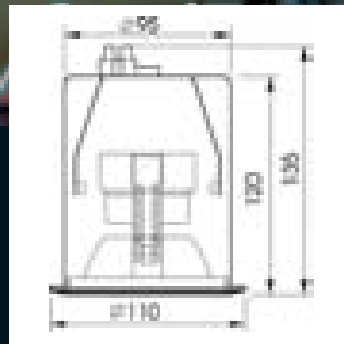


# SPOT LIGHT

## FRSL - FOCUS SERIES



FRSL FOCUS 4

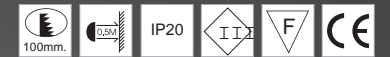


Model	Lamp	Lamp holder
FRSL FOCUS 3	1XMR16 12V 50W max.	GX 5.3
FRSL FOCUS 4	1XMR16 12V 50W max.	GX 5.3

colours available



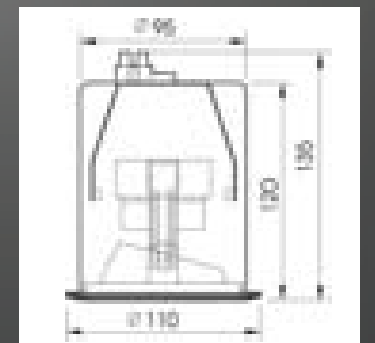
**FRATER**



OPTIONS

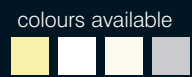


FRSL FOCUS 3

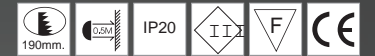


# SPOT LIGHT

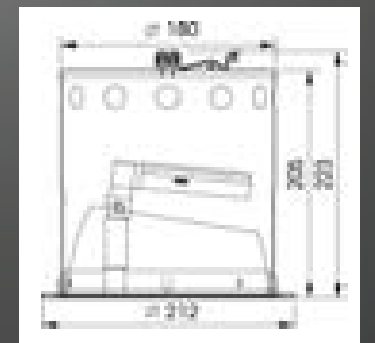
FRSL - FOCUS SERIES



**FRATER**



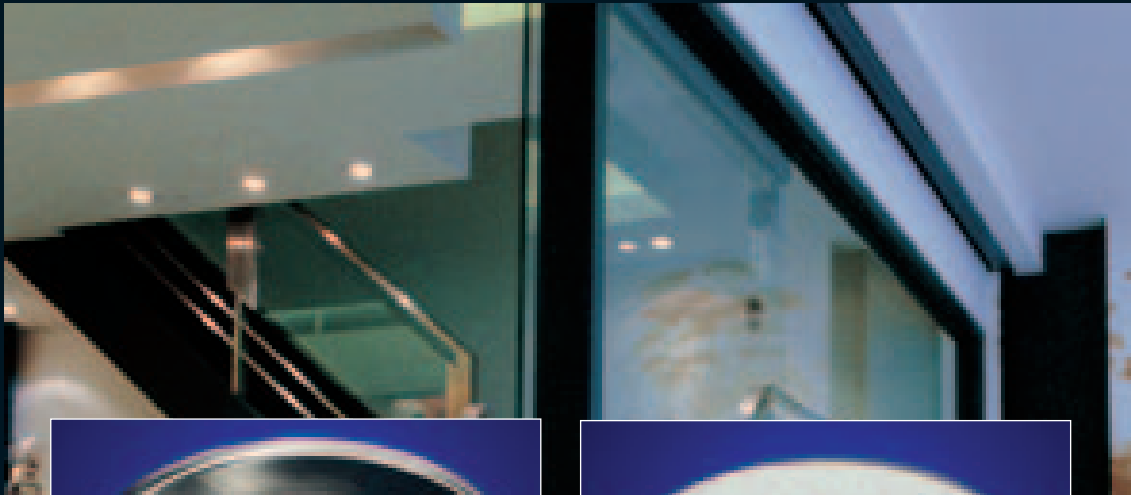
OPTIONS



Model	Lamp	Lamp holder
FRSL FOCUS 5	1XAR111 12V 100W max.	G53
FRSL FOCUS 5	1XPAR 30 100W max.	E27

# SPOT LIGHTS

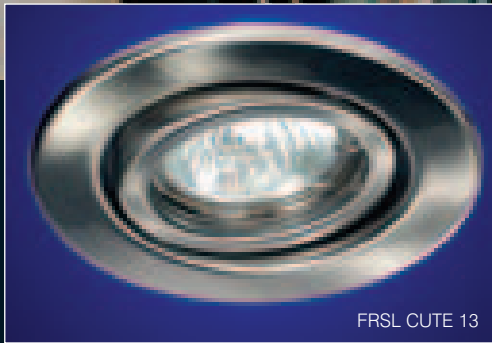
## FRSL - CUTE SERIES



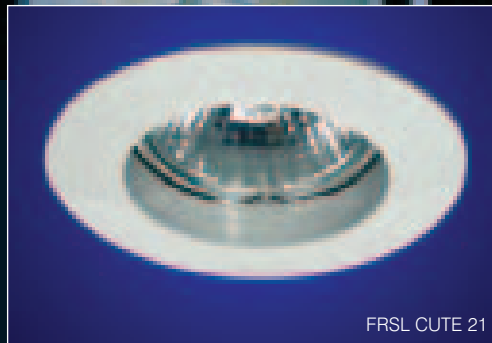
FRSL CUTE 11



FRSL CUTE 12

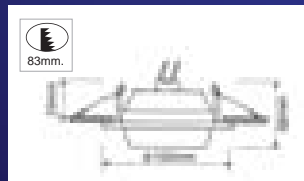
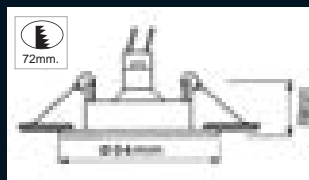
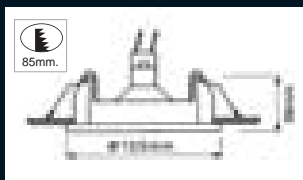


FRSL CUTE 13

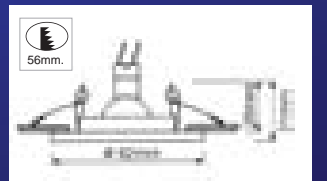


FRSL CUTE 21

colours available



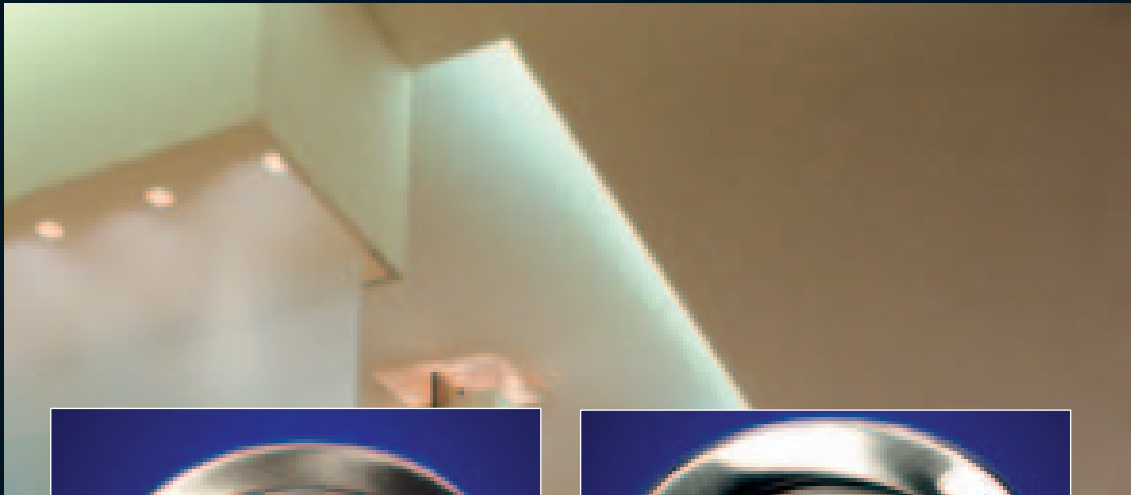
Model	Lamp	Lamp holder	Wattage
FRSL CUTE 11	MR16	GU5.3/GX5.3, GU10	50W
FRSL CUTE 12	MR16	GU5.3/GX5.3, GU10	50W
FRSL CUTE 13	MR16	GU5.3/GX5.3, GU10	50W
FRSL CUTE 21	MR16	GU5.3/GX5.3, GU10	50W





# SPOT LIGHTS

## FRSL - CUTE SERIES

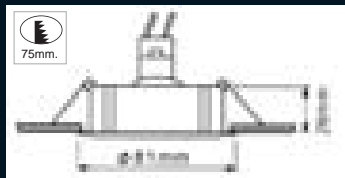


FRSL CUTE 24

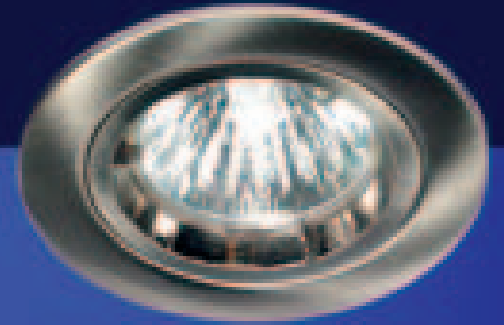


FRSL CUTE 25

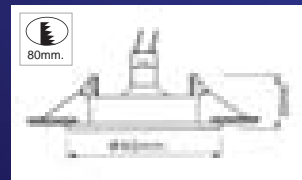
colours available



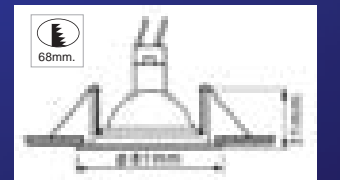
FRSL CUTE 22



FRSL CUTE 23



Model	Lamp	Lamp holder	Wattage
FRSL_CUTE 22	MR16	GU5.3/GX5.3, GU10	50W
FRSL_CUTE 23	MR16	GU5.3/GX5.3, GU10	50W
FRSL_CUTE 24	MR16	GU5.3/GX5.3, GU10	50W
FRSL_CUTE 25	MR16	GU5.3/GX5.3, GU10	50W





# SPOT LIGHTS

## FRSL - CUTE SERIES



FRSL CUTE 26



FRSL CUTE 27



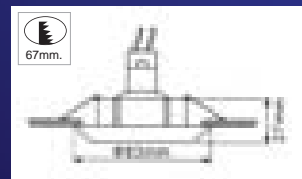
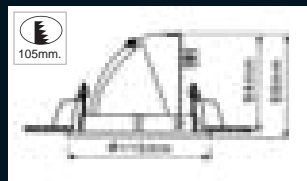
IP 65

FRSL CUTE 28



FRSL CUTE 52

colours available



Model	Lamp	Lamp holder	Wattage
FRSL CUTE 26	MR16	GU5.3/GX5.3, GU10	50W
FRSL CUTE 27	MR16	GU5.3/GX5.3, GU10	50W
FRSL CUTE 28	MR16	GU5.3/GX5.3	50W
FRSL CUTE 52	MR16	GU5.3/GX5.3	50W





AW ROSTAMANI HEADQUARTERS