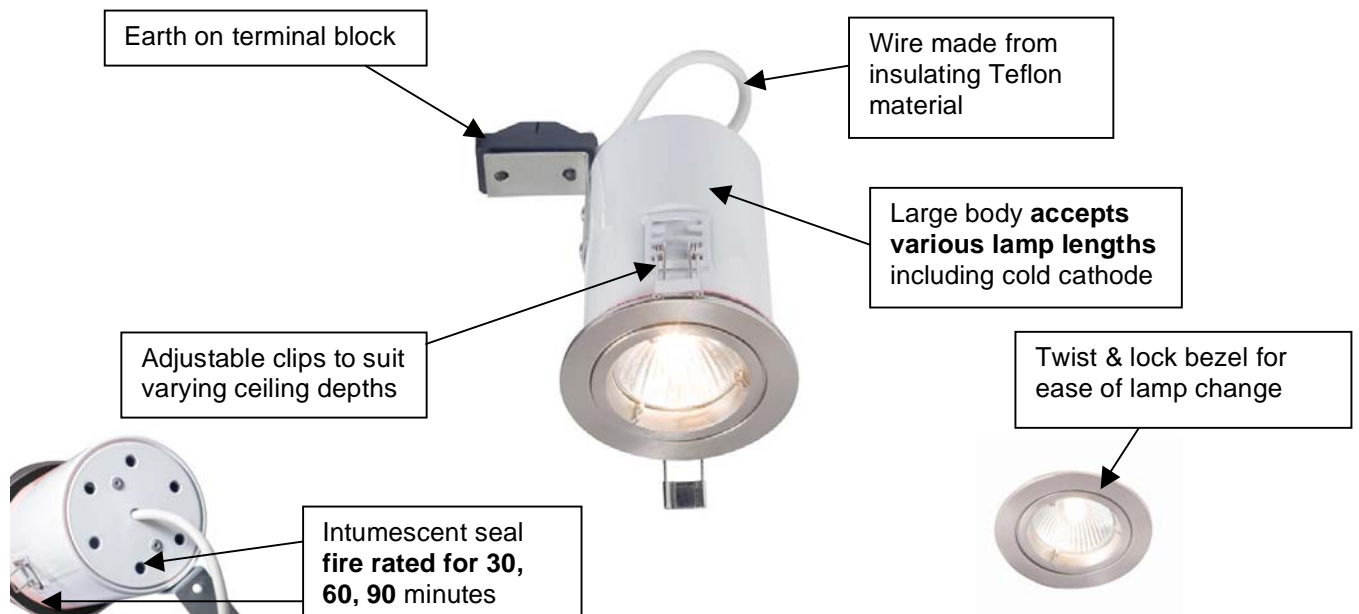


## ROBUS Low Voltage Fire Rated Downlight, Straight & Directional MULTI PACK



### Product Code

- RF101MP – 01 (Straight\White)
- RF101MP – 03 (Straight\Chrome)
- RF101MP – 13 (Straight\Brushed Chrome)
- RF108MP – 01 (Directional\White)
- RF108MP – 03 (Directional\Chrome)
- RF108MP – 13 (Directional\Brushed Chrome)

### Description

Fire rated downlight, with pressed steel body and die cast aluminium front bezel with intumescent seals to give 30,60 & 90mins fire protection rating in an appropriate rated ceiling. Available in white, brass, chrome and brushed chrome colours

### Features & Benefits at Glance

- Time Saving Installation
- Recessed downlight with pressed steel body and die cast aluminium front bezel
- Intumescent seals to give 30, 60 and 90 minutes protection
- Complies with BS476 Part 20, 21, and 23
- Test Report from Building Research Establishment

### MULTI PACK Contents

- 10x die cast Fire Rated low voltage fittings
- 10 x loop-in loop-out 70VA dimmable electronic transformers
- 10x 3000hr 50W dichroic lamps

### Why do you need Fire Rated Downlights

- Building regulations require that the fire resistance and acoustic rating of ceilings are maintained by installation of fire rated and acoustically resistant downlighters. Standard ceilings in single and two storey domestic structures are designed to have a minimum 30 minutes resistance to penetration by fire. In larger buildings, ceilings may be required to give up to 90 minutes protection.
- Building regulations Approved Document B states, If a fire separating element is to be effective, then every joint, or imperfection of fit, or opening to allow services to pass through the element, should be adequately protected by sealing or fire-stopping so that the fire resistance of the element is not impaired.
- The ROBUS range of fire rated downlights makes installation easy and ceilings safe. With fire and acoustic protection built into our fire rated downlights range, the fittings are acoustically rated for airborne and impact noise. Intumescent sealing ensures that the fire rated ceiling is maintained for its full duration.

## RF101MP & RF108MP

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- Acoustic Properties
  - To comply with regulations, all new buildings provide a certain level of noise attenuation between adjoining partitions. ROBUS fittings are designed to comply with BS5250 for air leakage and ensure compliance with building regulations part E (Acoustics), part L (Energy Efficiency, useful heat loss and passage of condensation) and part P (installation requirements)

### Benefits

- Good sound suppression
- Air leakage tested to BS 5250
- Usually cut out holes allow sound into the ceiling void
- As downlights are enclosed sound is trapped into fitting
- Little bit of gasket helps with noise vibration
- New buildings have concrete ceilings where sound is an issue. They buy in pre-cast floors with false ceilings. In these cases fire downlights won't be necessary. These are more for shop fittings, apartment blocks or when houses are being converted into 2 flats.

### Intended Use

- The fire rated downlights are not intended to stop a fire within the fitting
- It will stop a fire which has started from below from spreading upwards for a period of 30, 60 or 90 minutes, depending on the ceiling type.
- Eg: Block of apartments. A fire starts on level 1. All of the ceilings are protected for a certain amount of time. But as soon as you cut out a hole to install a fitting, you are interfering with the ceiling fire rating. An enclosed fire rated downlight will prevent the fire from spreading to level 2 of the apartment block.

### Features & Benefits - Detailed

Intumescent seals to give 30, 60 & 90 minutes fire protection rating in an appropriate ceiling

- The pressed steel body has an intumescent gasket at the ceiling cut out to seal the body to the ceiling and another at the back of the luminaire to seal the vent holes and cable hole in the event of fire.
- These intumescent gaskets (acts like an insulation material across the base and top of the fitting )expand in the event of fire by 4mm and this is what prevents the fire from spreading
- Negates need for firehat which is hard to align

Our fittings are substantially bigger and deeper than our competitors

- The reason for this is so that it accepts take various lamp types and lengths including our cold cathode lamps

Lamp lead is made from Teflon

- Teflon rated for 210°C continuously and for 250°C short time overloads which means that there is no chance of wires or insulation melting.
- Glass fibres extend to 1000°C which means that it's protected against mechanical damage.

Easy installation


- Long lamp holder leads make it easy to change the lamps
- ROBUS fire rated luminaires can be inserted into the ceiling from below quickly and easily like a standard downlight
- No need to use the fire-hats which are hard to align up.

Recessed downlight with pressed steel body & die cast aluminium front bezel

- High Quality material which won't rust or tarnish

### Product Specifications

## RF101MP & RF108MP

Protection against electric shock	Class III Safety Extra Low Voltage (from appropriate 12V transformer)			
Lamp type	MR16 Max. 50W			
Dimensions	Cut- Out	Overall Dia	Depth	Lamp Retention
• RF101	73mm	80mm	135mm	Twist & Lock
• RF108	86mm	97mm	140mm	Twist & Lock
Temperature range	-20°C < ta < 40°C			
Supply current	12V (from safety extra low voltage transformer)			
Ingress Protection	20			
	Suitable for mounting on normally flammable surface Minimum distance from illuminated object is 0.5 metres			
Complies with BS EN60598, BS5250, BS476 Parts 20, 21 & 23				

### Installation Instructions

!Electrical products can cause death or injury, or damage to property. If in any doubt about the installation or use of this product, consult a competent electrician.

- 1 Ensure mains supply is switched off
- 2 Mark ceiling with appropriate cut-out size
- 3 Before cutting, ensure that the hole does not impinge on joists, pipe work, cables or other building services
- 4 Ensure there is at least 100mm of free space around and 50mm above the luminaire. Do not cover the luminaire with thermal insulation
- 5 Connect supply cables Live and Neutral to fitting terminals (polarity is unimportant). Do Not Earth
- 6 Fit springs in position on luminaire that is appropriate to the ceiling thickness and offer luminaire up to cut-out with the longer leg of each spring being held vertically. The luminaire is retained in position by the spring tension between the short and the long leg of each spring against the ceiling
- 7 Lamp installation and replacement:

**!Ensure mains supply is off. !When operating the luminaire is too hot to touch. Switch off and allow to cool before undertaking ant maintenance work.**

RF201MP & RF208MP: twist bezel inner ring anticlockwise to unlock, unclip the lamp from the retaining spring at the back of the ring, hold lamp holder firmly and rotate lamp 1/8 turn anti-clockwise to remove, clockwise to insert.

### Certificate of Conformity

We hereby certify that ROBUS fire rated downlights models RF101, RF108, RF10165 (12V) and RF201, R208, RF10165GU (240V) comply with the following standards and requirements:

### Fire: Building Regulations Part B

**BS475:Part21:1987** (Fire tests on buildings and structures. Method of determination of the fire resistance of load bearing elements of construction)

- Engineered Joists: 90 minutes with Pozi-joist floor protected by 2 layers of 15mm Lafarge
- Firecheck plasterboard BRE Test Report No. 226515 (100minutes achieved)
- BRE Environmental, Bucknall Lane, Garston, Watford WD25 9XX

### Air Flow: Building Regulations Part C

## RF101MP & RF108MP

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**BS 5250:2002** (Code of Practice for control of condensation in buildings).

Straight Downlight	RF101, RF201	0.126m <sup>3</sup> /h
Adjustable Downlight	RF108, RF208	1.03m <sup>3</sup> /h
IP65 Downlight	RF10165, RF10165GU	0.021m <sup>3</sup> /h

All tests with 2 Pa pressure difference as per BSEN 13141-1 test method, per individual luminaire.

### Acoustics: Building Regulations Part E

**BSEN ISO 140-3:1995** (Acoustics, Measurement of sound insulation in buildings and of Building elements. Laboratory measurement of airborne sound insulation of building elements)

**BSEN ISO 140-6:1998** (Acoustics, Measurement of sound insulation in buildings and of Building elements. Laboratory measurement of impact sound insulation of floors)

**BSEN ISO 717-1:1997** (Acoustics, Rating of sound insulation in buildings and of Building elements. Airborne sound insulation)

**BSEN ISO 717-2:1997** (Acoustics, Rating of sound insulation in buildings and of Building elements. Impact sound insulation)

Acoustic tests carried out with Robust Details Appendix F floor by BRE, Test Report No 227913