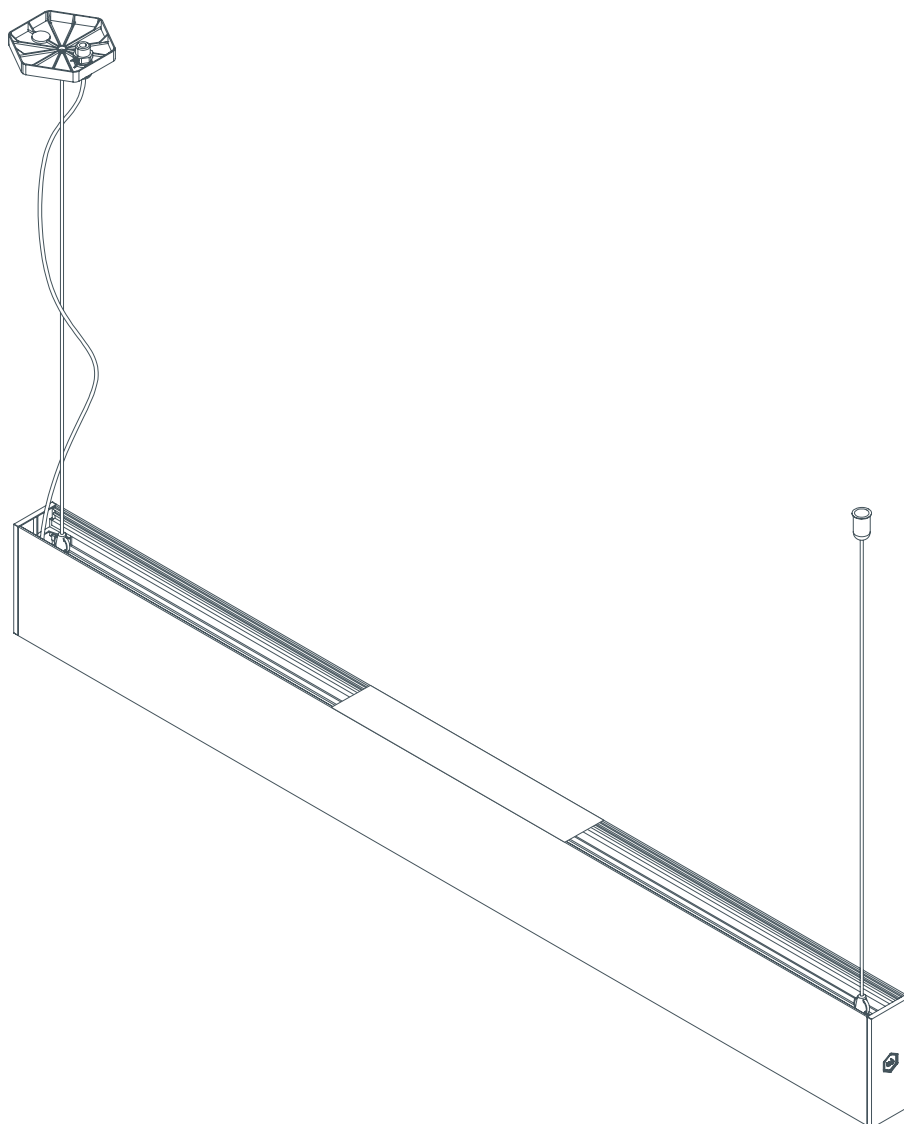


Linea

O&M Manual



Protect the environment by not disposing of this product with your household waste. Check with your local authority for recycling advice and facilities.

Unibox Statement

This manual serves as a comprehensive guide for the operation and maintenance of your Unibox product(s). If you encounter any uncertainties during maintenance procedures, please do not hesitate to contact us where a member of our staff can provide support you and address any questions or concerns you may have.

It is crucial to emphasise that only qualified electrical engineers or Unibox trained professionals should carry out any work on our

products. Additionally, it is essential to isolate all power sources during maintenance to ensure the personal safety of maintenance personnel. We are ready to assist you at any stage of the process. Please feel free to reach out to our team today at 0161 655 2100 or quality@unibox.co.uk, or simply scan the QR code provided below.



Unibox Warranty - English

Standard Warranty

Definitions

The Company – United Aluminium Limited and subsidiary companies (including trading styles Unibox and Lumenal).

The Product – Equipment purchased from The Company.

The Component – Piece of The Product which can be sent for diagnosis.

Service – Any additional time or service purchased from The Company for installation.

The Customer – The entity that has bought The Product.

Statement

The company's products are supplied with a 3-year Warranty. This is the company's commitment to replace or repair the product, free of charge, following any manufacturing defects with the product that may arise after date of invoice.

All components used in our products are tested before they leave our factory to ensure that they are free from defects and are in good working order. All components used are appropriate for the products produced and comply with UK regulatory guidelines and obligations.

In order to fulfil the terms of this Warranty, Customers must have used a qualified electrician to for any works on our product in accordance with BS7671-IET wiring regulations.

Defects within first year – UK mainland only

Within the first year, the company will attempt to repair or replace the product free of charge to resolve any defect that can be substantiated as a manufacturing fault. The course of action taken will be at the company's sole discretion. If the fault is not deemed to be a manufacturing fault, the site visit may be subject to charge (see General Terms for site visit charges).

Defects within 2-3 years – UK mainland only

For any defects identified in the 2nd or 3rd year, the company will repair or replace a returned product or part that can be verifiably shown to be due to a manufacturers fault. However where return to manufacturer is not possible the Company will carry out a remote diagnostic after the fault report has been completed. If The Company think it is required, a chargeable site visit will be arranged, which will not be chargeable if the fault is found to be a manufacturing issue. The company will carry out a repair or replacement on site. The course of action taken will be at the company's sole discretion. Please refer to Warranty General Terms.

To exercise your rights under this Warranty, the component should be returned to Unibox, Greenside Way, Middleton, M24 1SW by The Customer for diagnosis, repair or replacement.

Any on-going works on the product, should be completed by a qualified electrician in accordance with BS7671-IET wiring regulations.

Defects within 2-3 years – UK mainland only

The following terms must be met in order to claim under the Standard Warranty:

1. This Warranty covers products installed and maintained in the United Kingdom only (including Northern Ireland).
2. If the product or service in question has not been paid for in full within the agreed payment terms of the invoice issued, then the Warranty is null and void.
3. Following the repair or replacement of The Product, The Company will continue to honour the Warranty on The Product for the unexpired period of the Warranty.
4. The Warranty is limited to material / component defects only.

5. The Customer will complete and return the Warranty Claim Form to The Company in order for defects to be diagnosed effectively. The Warranty Claim Form will be sent to The Customer on receipt of a warranty claim.
6. If it is not possible to return The Product to The Company thereby necessitating the need to attend the Customers premises, The Company will charge a discounted rate of £200 plus travelling expenses (£1.75 per mile from The Company base to site, including return) per site within the United Kingdom (including Northern Ireland) to attend to any repairs in situ. These costs will only apply if fault is not deemed to be a manufacturing one. Please note: any costs in relation to the access to equipment in years 2-3 is not covered. These will be invoiced separately once a full remedy has been reached.

Warranty Exclusions

The Warranty excludes the following:

1. Defects arising from; wilful damage, unusual wear and tear, alteration or modifications undertaken to The Product by either the Customer or any installation team independent to The Company.
2. Damage or other failure arising from installation by another party, extraordinary events (Force Majeure) including, but not limited to; extreme weather events, fire, power failure.
3. If The Company attends The Customer's premises and the repair is found to be outside of the above Warranty terms but within the exclusions (E.g., non-manufacturing fault) all labour, travel and expenses costs will be charged to The Customer.
4. Alterations made to The Product, so that it is not used for the purpose which it was intended.

Disclaimer

Damaged goods should be reported to quality@unibox.co.uk within 72 hours of receipt of goods.

The Company will not be held responsible or liable for any expenses or consequential loss or damages resulting from defective products with liability limited to the terms of the Warranty.

The Company will not be held responsible for any damage or loss arising from any information (including but not limited to drawing, design or specification) provided by The Customer.

The Company will not be liable for any harm to goods, individuals or property on the Customer's premises.

The Customer's statutory rights are not affected by this Warranty.

Cleaning and Maintenance Procedures

Product Materials

Acrylics / Polycarbonates

Use a bucket of lukewarm water, with a few drops of mild liquid detergent (such as washing up liquid) and a non-abrasive cloth to clean a range of plastics. It's important the cloth is non-abrasive as acrylics are more easily scratched than standard glass. Put plenty of water in your bucket so that you can rinse the cloth frequently. This prevents any dirt and grit from scratching the acrylic.

As a bonus, at the end of the cleaning process, using an antistatic cleaner will prevent a build up of static charge which can attract dust building up.

Aluminium – Anodised / Powder-coated

Both anodised and painted surfaces should be cleaned using a few drops of mild liquid detergent (such as washing up liquid) in a bucket of lukewarm water. The cleaning solution should be applied using a non-abrasive cloth, sponge or brush. Avoid the use of strong acid or alkali cleaners.

LEDs

For dusty or slightly dirty LEDs, simple dry cleaning is usually sufficient. Ideally, cleaning by means of compressed air (e.g. central supply or spray can) is recommended here. The LEDs and/or the board are blasted with clean air. If compressed air from a central supply is used, care should be taken that the air is purified. If this is not the case, the opposite effect may be achieved, e.g. additional contaminants such as oils may be sprayed onto the components or the board.

The simplest method is cleaning the LEDs with a clean, soft, lint-free, dry cloth (cellulose or linen) or a clean brush.

Driver Cabinets/Units

PLEASE NOTE: driver and driver cabinets should only be accessed by qualified electricians.

If driver failure is suspected contact Unibox directly.

Cabinets should be cleaned regularly to remove dust and other loose debris. Cabling and other connections must be avoided.

Failure Report

Please get in touch with the below information if there is a failure or maintenance issue.

Site name and address:

Contact name:

Contact number:

Description of failure:

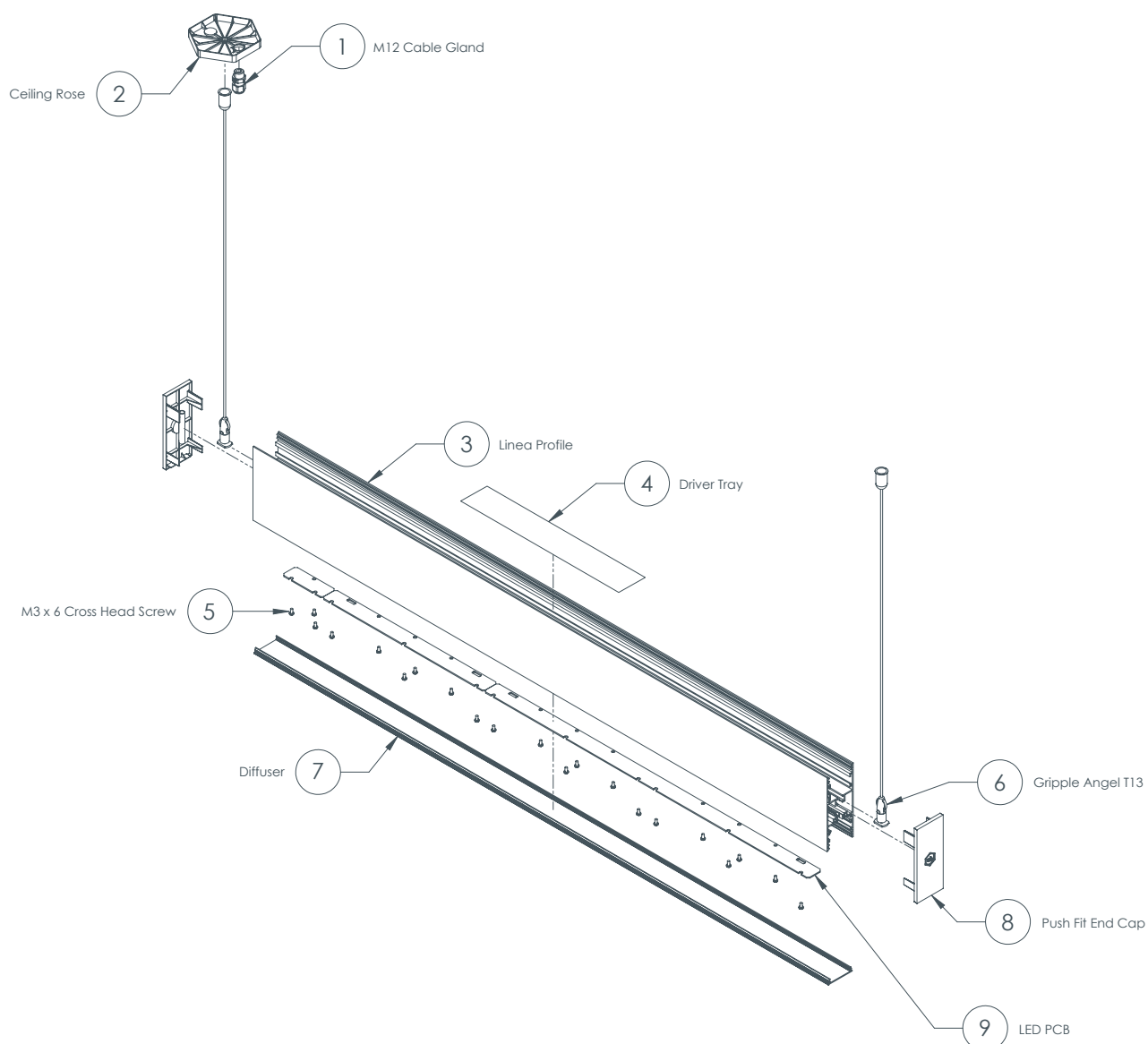
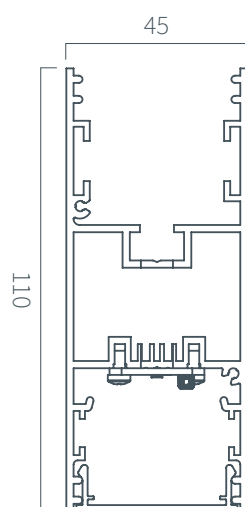
Any images of failure:

LED Replacement

Linea has been designed for user-friendly component interchangeability and easy access. This enables product maintenance to be carried out in the event of LED failure whereby the existing strip can be replaced with a new working set of LEDs provided by Unibox.

In order to do this, simply remove the end-cap from the opposite end of the power cable, slide out the LED strip and replace accordingly. In the end-cap breaking from being removed, Unibox will supply an endcap with every new replacement LED strip.

Appendices - 1.1 Technical Drawings



Appendices - 1.2 LED Data

LED Length (mm)	Input Voltage	Output Voltage	Power Consumption	Lumen Output	Lumen Efficiency	IP Rating	CRI	LED Beam Angle	Nominal Lifetime
600	220 V - 240V / 50 Hz - 60 Hz	24 V	8.64 W	2200K: 1080 lm 2400K: 1131 lm 2700K: 1183 lm 3000K: 1207 lm 4000K: 1279 lm 6500K: 1296 lm	2200K: 125 lm / W 2400K: 131 lm / W 2700K: 137 lm / W 3000K: 140 lm / W 4000K: 148 lm / W 6500K: 150 lm / W	IP 20	90+	120 °	54000 hours

LED Length (mm)	Input Voltage	Output Voltage	Power Consumption	Lumen Output	Lumen Efficiency	IP Rating	CRI	LED Beam Angle	Nominal Lifetime
900	220 V - 240V / 50 Hz - 60 Hz	24 V	12.96 W	2200K: 1620 lm 2400K: 1698 lm 2700K: 1775 lm 3000K: 1814 lm 4000K: 1918 lm 6500K: 1944 lm	2200K: 125 lm / W 2400K: 131 lm / W 2700K: 137 lm / W 3000K: 140 lm / W 4000K: 148 lm / W 6500K: 150 lm / W	IP 20	90+	120 °	54000 hours

LED Length (mm)	Input Voltage	Output Voltage	Power Consumption	Lumen Output	Lumen Efficiency	IP Rating	CRI	LED Beam Angle	Nominal Lifetime
1000	220 V - 240V / 50 Hz - 60 Hz	24 V	14.4 W	2200K: 1800 lm 2400K: 1886 lm 2700K: 1972 lm 3000K: 2016 lm 4000K: 2131 lm 6500K: 2160 lm	2200K: 125 lm / W 2400K: 131 lm / W 2700K: 137 lm / W 3000K: 140 lm / W 4000K: 148 lm / W 6500K: 150 lm / W	IP 20	90+	120 °	54000 hours

LED Length (mm)	Input Voltage	Output Voltage	Power Consumption	Lumen Output	Lumen Efficiency	IP Rating	CRI	LED Beam Angle	Nominal Lifetime
1200	220 V - 240V / 50 Hz - 60 Hz	24 V	17.28 W	2200K: 2160 lm 2400K: 2263 lm 2700K: 2366 lm 3000K: 2419 lm 4000K: 2557 lm 6500K: 2592 lm	2200K: 125 lm / W 2400K: 131 lm / W 2700K: 137 lm / W 3000K: 140 lm / W 4000K: 148 lm / W 6500K: 150 lm / W	IP 20	90+	120 °	54000 hours

LED Length (mm)	Input Voltage	Output Voltage	Power Consumption	Lumen Output	Lumen Efficiency	IP Rating	CRI	LED Beam Angle	Nominal Lifetime
1500	220 V - 240V / 50 Hz - 60 Hz	24 V	12.96 W	2200K: 2700 lm 2400K: 2829 lm 2700K: 2968 lm 3000K: 3024 lm 4000K: 3197 lm 6500K: 3240 lm	2200K: 125 lm / W 2400K: 131 lm / W 2700K: 137 lm / W 3000K: 140 lm / W 4000K: 148 lm / W 6500K: 150 lm / W	IP 20	90+	120 °	54000 hours

Appendices - 1.2 LED Data

LED Length (mm)	Input Voltage	Output Voltage	Power Consumption	Lumen Output	Lumen Efficiency	IP Rating	CRI	LED Beam Angle	Nominal Lifetime
1800	220 V - 240V / 50 Hz - 60 Hz	24 V	25.92 W	2200K: 3240 lm 2400K: 3395 lm 2700K: 3549 lm 3000K: 3629 lm 4000K: 3836 lm 6500K: 3888 lm	2200K: 125 lm / W 2400K: 131 lm / W 2700K: 137 lm / W 3000K: 140 lm / W 4000K: 148 lm / W 6500K: 150 lm / W	IP 20	90+	120 °	54000 hours

LED Length (mm)	Input Voltage	Output Voltage	Power Consumption	Lumen Output	Lumen Efficiency	IP Rating	CRI	LED Beam Angle	Nominal Lifetime
2000	220 V - 240V / 50 Hz - 60 Hz	24 V	28.8 W	2200K: 3600 lm 2400K: 3772 lm 2700K: 3945 lm 3000K: 4032 lm 4000K: 4262 lm 6500K: 4320 lm	2200K: 125 lm / W 2400K: 131 lm / W 2700K: 137 lm / W 3000K: 140 lm / W 4000K: 148 lm / W 6500K: 150 lm / W	IP 20	90+	120 °	54000 hours

LED Length (mm)	Input Voltage	Output Voltage	Power Consumption	Lumen Output	Lumen Efficiency	IP Rating	CRI	LED Beam Angle	Nominal Lifetime
2400	220 V - 240V / 50 Hz - 60 Hz	24 V	34.56 W	2200K: 4320 lm 2400K: 4526 lm 2700K: 4733 lm 3000K: 4838 lm 4000K: 5114 lm 6500K: 5184 lm	2200K: 125 lm / W 2400K: 131 lm / W 2700K: 137 lm / W 3000K: 140 lm / W 4000K: 148 lm / W 6500K: 150 lm / W	IP 20	90+	120 °	54000 hours

LED Length (mm)	Input Voltage	Output Voltage	Power Consumption	Lumen Output	Lumen Efficiency	IP Rating	CRI	LED Beam Angle	Nominal Lifetime
3000	220 V - 240V / 50 Hz - 60 Hz	24 V	43.2 W	2200K: 5400 lm 2400K: 5658 lm 2700K: 5916 lm 3000K: 6048 lm 4000K: 6393 lm 6500K: 6480 lm	2200K: 125 lm / W 2400K: 131 lm / W 2700K: 137 lm / W 3000K: 140 lm / W 4000K: 148 lm / W 6500K: 150 lm / W	IP 20	90+	120 °	54000 hours

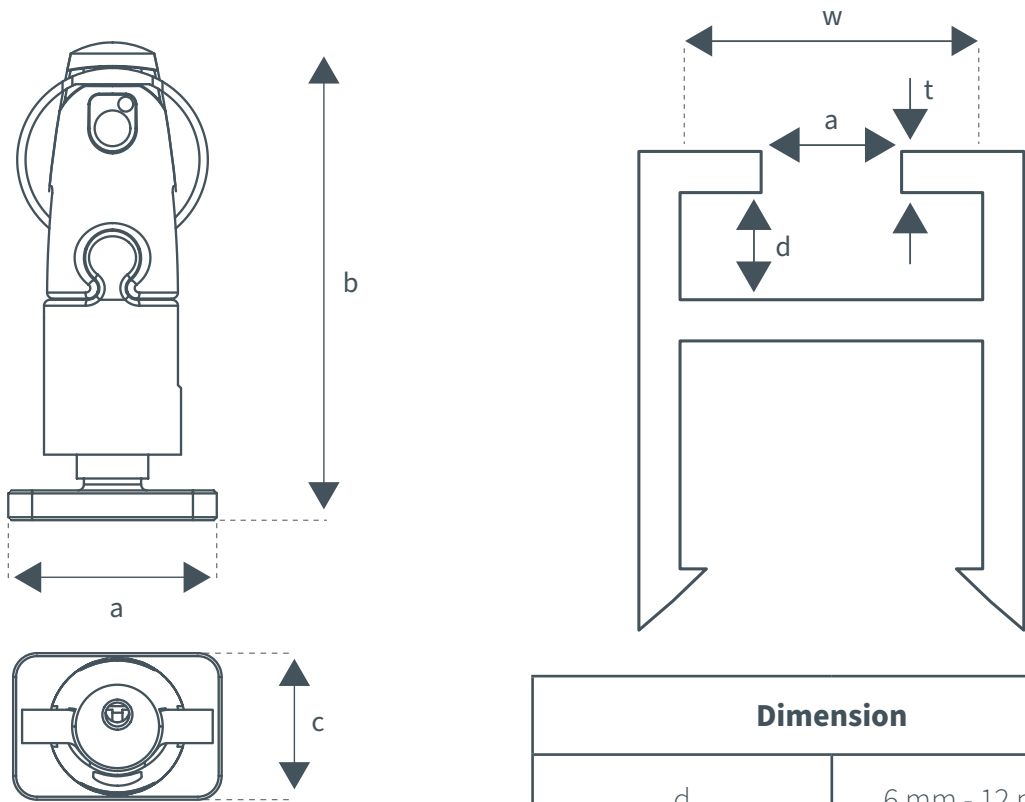
Appendices - 1.2 LED Data

Colour Temp	lm/m (avg)		lm/w		CRI	SCDM
	Mid	High	mid	High		
2700	2068	4278	104	98	80+*	3 Step
3000	2107	4379	107	101	80+*	3 Step
4000	2235	4643	113	107	80+*	3 Step
5000	2220	4613	113	106	80+*	3 Step
6500	2190	4549	111	104	80+*	3 Step
2700-6500	TBC	TBC	TBC	TBC	80+*	3 Step

*90+ available upon request

Appendices - 1.3 Component Data Sheets

Angel T 19 gripple Specification:



Dimension	
A	17.5 mm
B	40.1 mm
C	12.3 mm

Dimension	
d	6 mm - 12 mm*
a	min 6.0 max 9.5mm (no washer) max 12.0 (with washer)
w	12.4 mm - 19 mm
t	Max 3.75 mm without the washer, Max 2.35 mm if washer is used.

* Max 9.5 mm without washer

SUBMITTAL INFORMATION

Safe Working Load:
Max. Load rating of this product in a vertical suspension = 15kg

Safety Factor: 5:1

Material:
Housing - Zinc Alloy (EN 12844 zp2)
Roller - Brass (BSEN 12164)
Spring - Acetal (POM)
Plating - Bright Nickle Plating (BS 4758)
Washer - Nicke plated steel
Foot - Zinc plated steel

For more information visit: www.gripple.com

Manufacturer Contact Information

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