



BEARING & TOOL CENTRE



Head Office

1st Floor, Vyapar Bhavan, Kadia Kui,
Relief Road, Ahmedabad - 380001.
Ph:- 079 - 22160386, 65254835, 22134835
Mobile : 7819819941, 9375706649

Ahmedabad Branch

GF-B-14, Jayraj Complex, Nr. Soni ni Chawl,
Odhav, Ahmedabad - 382415.
Ph:- 079 - 22890202, 65458950, 65404657, 65400202
Mobile : 7878825197, 7819819938, 9375706648

Website : www.bearingtoolcentre.com, www.bearingtoolscentre.com | Email : info@bearingtoolcentre.com

Our Sister Concern : RELIEF SERVICE CENTRE

Repairs, Removal of Jaw Error, Bore Gauge Extension, Instrument Modifications & Spares

Quotation

130 Magnifying Flexible Arm Illuminated - Lensel

| FINAL EX-WORKS PRICES Basic prices, freight, insurance ,taxes extra. w.e.f 1 st February 2014 | | | |
|---|--|--------------------|-----------|
| Sr. No | Magnifier Main Units | New EX-WORKS PRICE | Catalog |
| 1 | Standard Model (L104 ST) | 3150 | Page - 3 |
| 2 | Compact version (L104CV) including base | 3700 | Page - 3 |
| 3 | Semi Deluxe Model (L104 SD) | 4250 | Page - 3 |
| 4 | Deluxe Model (L104DX) | 6200 | Page - 4 |
| 5 | EVSD Semi-Deluxe ESD safe version (L104EVSD) | 5070 | Page - 5 |
| 6 | EVDX Deluxe ESD safe version (L104EVDX) | 6800 | Page - 5 |
| 7 | Seed Purity(L104I) (MOQ >6nos.) | 7550 | Page - 7 |
| | | | |
| è | Magnifier Main Units WITH LED | | |
| 8 | Standard Model (L104 ST) with LED | 4170 | Page - 3 |
| 9 | Semi Deluxe Model (L104 SD) with LED | 5280 | Page - 3 |
| | | | |
| 10 | Deluxe Model with High Magnification Lens | 8280 | Page - 9 |
| | | | |
| è | Bases | | |
| 11 | Clamping type base (L104A) | 195 | Page - 10 |
| 12 | Moveable Heavy Base(L104B) | 750 | Page - 10 |
| 13 | Wall Mounting Base (L104E).. | 325 | |
| 14 | Bolting type Base(L104F). | 195 | Page - 7 |
| 15 | Table Bush Base(L104G).. | 195 | Page - 7 |
| | | | |
| è | Accessories | | |
| 16 | Increased Mag Attach (L104-1) | 185 | Page - 7 |
| 17 | Diffuser Cover (L104-2) | 170 | Page - 7 |
| 18 | Spot Lens (Addl cost if this lens is to be fitted on main lens) | 185 | |

Terms & Conditions –

- Goods offered - Subject to Prior Sale
- Price Validity: "15 Days from Date of Quotation"
- C.S.T 2% extra against form C. Otherwise 5% without form C For Out of Gujarat Sales only.
- VAT 5% extra for Sales within Gujarat. Prices Ex-Godown Ahmedabad.
- Payment against Proforma Invoice, Packing, Forwarding & Freight extra.
- **Bank Detail** – Kotak Mahindra Bank Ltd.
- **Branch** – Shivranjini
- **Bank IFSC Code** - KKBK 0000 810
- **Bank Account No.** 08102 00000 2689
- Note - While making payment online do mention your Company's name.
- TIN NO 24070901229 , CST No. 24570901229
- We are looking forward to your valued orders.

STANDARD MODEL

Ordering Code : L 104 ST

Magnification:

This magnifier has a large sized (130 mm diameter) specially designed precision lens that gives 4X area magnification without any chromatic or spherical aberrations over the entire field of view, thus providing perfect strain-free vision. The lens provides bi-ocular vision with depth perception and comfortable 250 mm working distance underneath, thus providing for ease of operation under the lens.

Illumination:

A 22 watt circular fluorescent tube housed in a tough ABS shed around the lens provides light that is shadowless, glarefree, cool and of daylight colour, thus providing perfect illumination for all operations under the lens.

Versatile Stand :

Easy positioning of the lens/light module at any point in any orientation is made possible by a well-balanced stand with feather touch movement that has a reach of 900 mm from the base. This provides perfect ease and flexibility in operation. Every component is specially engineered to provide trouble-free functioning and long durability under tough working conditions.

Aesthetics :

In addition to careful engineering of each component the unit is specially designed to provide a pleasing and an elegant appearance. The components have perfect finish in combination of chrome and matched pastel shades.



SEMI DELUXE MODEL

Ordering Code : L 104 SD



The Semi Deluxe Model offers some advantages over the Standard Model, but not all the advantages of the Deluxe Model. It is essentially a trade-off between the number of features and the product price. It is for the user to decide which features versus price mix best meets his requirements.

- 1) Primarily Semi Deluxe Model offers all the advantages of the enclosed construction, as described under points 3 & 4 in the description on Deluxe Model on page 04.
- 2). Rest of the features are same as in the Standard Model. Both Standard and Semi Deluxe Models do not offer those features of the Deluxe Model that are described under points 1,2,5 & 6 in the description on Deluxe Model on page 04.

DELUXE MODEL

Ordering Code : L 104 DX

In addition to all the features available with Standard Model, the Deluxe Model offers some special features, making it *the finest available illuminated magnifier*. Given below is a brief description of these special features:

- 1) The lens is made of the finest quality optical glass giving crystal clear view with the object being seen in its true natural colours.
- 2) This 4X area magnification lens has a large rectangular size (170 mm X 105 mm) specially designed for giving perfectly strainfree vision with both eyes. This enables continuous viewing for long hours without any fatigue whatsoever.
- 3) The entire spring balancing mechanism of the magnifier is built inside the magnifier's body, thus providing some unique advantages:
 - a) Most pleasing form and aesthetics.
 - b) This unbroken external surface can be provided with highly durable surface finish, thus ensuring that the unit retains its aesthetic appeal even after several years of heavy duty usage.
 - c) Also, because of this enclosed construction this model is the ideal choice for use in highly corrosive or humid environment.
- 4) This model's enclosed construction is particularly amenable to Electro Static Discharge (ESD) Proofing, which is mandatory in certain sensitive applications such as in electronics and explosives industries.
- 5) This model offers both shadowless as well as directional lighting modes. Although in general shadowless illumination is preferred - there are many applications (eg. study of minute surface defects) where directional illumination is essential for highlighting defects and other features of interest.
- 6) Since the lens is held in a slim (but tough) edge from the front side, the user does not lose eye-contact with the object under view when switching between direct and magnified view.



SPECIAL VERSIONS

Compact Version

Ordering Code : L 104 CV

This version offers the advantage of occupying minimum space on the work table, but has limited flexibility for placement of the lens/light module. It is recommended where there is a space constraint.



Double Magnification Version

Ordering Code : L 104 DV

The optical system in this version consists of two matched 130 mm dia lenses together giving a power of 9D. This enables a relatively larger Field of View (130mm) despite the higher power. It may be noted that with the Increased Magnification Attachment (an accessory described on page 06) one can get a power of 10D, but the Field of View gets restricted to only 40 mm.

Double Magnification Version is recommended where increased magnification is required, but where the duration of viewing is limited. Whereas, for continuous, long duration viewing it is advisable to use the other models.

ESD Safe Version

Ordering Code : L 104 EV

Although this version looks externally similar to others it has several features in its surface finishes and internal construction that ensure surface resistivity and surface to ground resistance are kept well within the ESD compatible limits.

ESD Safe Version is recommended in applications that are sensitive to damage by electro-static discharge, such as in electronics and explosives industries.



ESD Safe Magnifiers

Electronic assembly shops often need a work environment that ensures no static electricity build up and thus ensure accidental arcing that can damage sensitive components. These magnifiers qualify for use in such environments by providing a long lasting dissipative surfaces for parts that may come close to the sensitive work. ESD Safe Models are available in both Deluxe and Semi deluxe versions and with all different mounting bases. These are not available in the Standard version. Their optical and mechanical specifications are the same as that of respective *Deluxe Model* and *Semi Deluxe Model*.

Surface Resistivity: $10E6 - 10E11$ Ohms/sq Surface to Ground Resistance: $10E5 - 10E9$ Ohms Static Generation: Not noticeable

WHY ESD SAFE MAGNIFIERS?

Extensive use of highly electro-static discharge (ESD) sensitive components in today's electronic industry necessitate manufacturing & assembly shop floors to be designed and set up with this aspect in mind, and it is necessary that the equipment used there must confirm to this requirement. We have done considerable research in order to provide this solution in regard to Magnifiers.

The damage to the sensitive components occurs due to electric discharge between component and some charged object in the vicinity, or a conductor shorted to the ground. The damage can be total or irreversible, and if the component is mounted on a board the entire board can get rejected. Like all other equipments and instruments used in these factories, the Magnifiers too have to be ESD proofed. In our ESD Safe Magnifiers this is ensured in terms of various parameters (quantitative values given below) such as static generation, resistance value from surface to ground, and surface resistivity -which must remain within the Dissipative Range

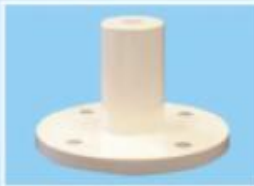
To attain these parameters we use specially imported dissipative polymers, dissipative paints, dissipative coatings, special electrical layout etc. Electrical Resistance Values of our Magnifiers & their components: Surface Resistivity: $10E6 - 10E11$ Ohms/sq Surface to Ground Resistance: $10E5 - 10E9$ Ohms Static Generation (by friction with Thermo cool): NIL The above figures confirm to requirement of EOS/ESD Association Standards 20.20 (1999) for Electrostatic Discharge control areas. (NB: It is necessary that all other items in the work area such as packing materials/bags, work bench surfaces, storage racks, grounding cords, chairs, mats, bins, floor surfaces, footwear/gloves/aprons, conveyor belts etc. have resistance properties that remain well within $10E3$ to $10E12$ Ohms.).

For specific details kindly contact us.



Base

(Ordering Code : L 104 D)
A light and stable stand with 4 sturdy legs. Overall height 100 cm. Has 4 quality castors for easy mobility, which can be unscrewed if not required.



Bolting Type Base

(Ordering Code : L 104 F)
For mounting on a horizontal surface. Will require 4 holes to be bored into the surface.



Table Bush Base

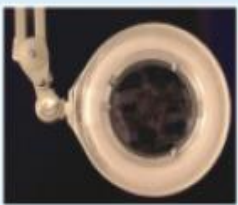
(Ordering Code : L 104 G)
Saves table space. Will require boring a 20 mm hole in the table top. Table top thickness upto 40 mm.

ACCESSORIES



Increased Magnification Attachment

(Ordering Code : L 104-1)
Specially designed 55 mm dia. glass lens gives 10X area magnification in combination with main 130 mm dia. lens. This lens can be moved in and out of the main field with feather-touch movement. It is useful for study of particular areas of interest under high magnification.



Diffuser Cover

(Ordering Code : L 104-2)
Consists of precisely moulded pyramidal indentations that help in totally cutting out glare. As this cover is moulded from a break resistant material, it also provides a protection to the tube-light.

LED illumination models (Standard and Semi-deluxe)

The LED ring illumination is available in ST (Standard) and SD (Semi-deluxe) models.

| | | | |
|---|---|--|--|
| 1 | LED ring with 40 LEDs in twin rings | | Shadow free lighting |
| 2 | Power consumption | 8 watts | Low power consumption, one-third of CFL unit |
| 3 | Lumen output | 800 lumens | High output |
| 4 | Colour temperature | 60000K, | Comfortable daylight |
| 5 | Nominal Lux level at working plane 150 mm | 2300 Lux | Matched to CFL level, higher can be provided. |
| 6 | Lamp Life | 50000 hrs | This is rated theoretical life as per LED mfgr. This is not warranted by LenseL. |
| | Other product specifications | Standard | Semi Deluxe |
| 1 | Lens | 130mm dia | 130mm dia with 4X area magnification |
| 2 | Reach | 900 mm reach from pivot and 600 mm in vertical plane | 900 mm reach from pivot and 600 mm in vertical plane |
| 3 | Illumination | LED | LED |

Our attachments Increased Magnification attachment (L104-1), and options of Bases (L104A to H), and additional Spot Lens are available with these LED Models. A diffuser cover is incorporated in the basic LED unit. The ESD safe version is also available in Semi deluxe model.



Deluxe model with High Magnification lens



| | |
|------------------|---|
| 1. Lens | Primary lens of 170 mm (L) * 105mm(W) Lens of optimal design is made of crystal clear optical crown glass. This ensures a comfortable viewing for long hours. |
| 2. Magnification | 2.25 X or > 5Times area magnification |
| 3. Illumination | 2 x 7 watts Compact Fluorescent Lamps (CFLs) |
| 4. Stand | The Stand is re-engineered to take care of the heavier lens. Internal concealed spring mechanism allows positioning the Optical head with 900 mm reach from the pivot base and 600 mm in vertical plane |

This product is better suited for inspections with work breaks. It is preferred in applications that truly demand the higher magnification.

This product is available with any of the bases and can be combined with Increased Magnification Attachment (IMA), L104-1. Spot lens is not suitable for this high magnification lens and is not offered.



Ordering Code: L104ST

Basic Model name: Standard Model Flexible Arm Illuminated Magnifier

Key features

Magnification: 4 times area magnification, Dia 130 mm main lens

Stand: External spring mechanism with 900 mm reach from pivot and 600 mm in vertical plane

Illumination: LED ring with 40 LEDs in twin rings

| | | |
|---|----------------------|--|
| LED ring with 40 LEDs in twin rings | | Shadow free lighting |
| Power consumption | 8 watts | Low power consumption, one-third of CFL unit |
| Lumen output | 800 lumens | High output |
| Colour temperature | 6000 ⁰ K, | Comfortable daylight |
| Nominal Lux level at working plane 150 mm | 2300 Lux | Matched to CFL level, higher can be provided. |
| Lamp Life | 50000 hrs | This is rated theoretical life as per LED mfgr. This is not warranted by LenseL. |

Mounting option:

Clamping type Heavy Base : L104A

popular Clamping Base (like a C Clamp). Fits at the edge of the work table that is up to 55 mm thick. Allows full extension and 360 deg swivel around mount axis.

The advantage is that it does not use any work space and there is no drilling of worktable.

Suitable for Industrial shop floors, office , lab , home environments

This model can also be mount on Movable Heavy Base (L104B) specifications are as given below

Mounting option:

Movable Heavy Base : L104B

This is a stand alone base, requires no fitting at all. It is just kept on the table and works for even a fully extended magnifier stand.

The unit can be swivelled only 30 deg left and right of the central position. The base is designed to occupy very little work space, but it does occupy table Space.

Accessories for additional magnification to be purchase separately

1. Order code: L104 -1

Accessory name: Increased Magnification Attachment

Key feature: Dia 50 mm powerful additional lens that can be swiung in the field of view under main lens to provide 10 X area magnification in combination with main lens.

To be ordered with the main unit for factory fitment. **Price: Rs300/- +Taxes**

2. Order code: L104 -3

Accessory name: Spot Lens

Key feature: Dia 30 mm powerful additional lens that is permanently fused on to the main lens to provide 16 X area magnification in combination with main lens.

To be ordered with the main unit for factory fitment. : **Price: Rs 300/- +Taxes**

🕒 Delivery Schedule

: Normal dispatch within 7-8 working days after receipt of clear PO and advance.