

How to select your Edbro cylinder

Make a decision about the style of mounting:

Outer cover type



The outer cover design is very strong and suits simple square fronted body designs. Stroke variants do not affect mounting centres but the cylinder reduces the available bodylength because a cab gap is required. The extra strength has a weight penalty but it may facilitate a simple and light body design.

Plain eye type



This is the lightest possible cylinder but is not as strong as the outer cover type. The plain eye is welded to the smallest tube so is very robust and so provides some form of sideload resistance. However, the body design is now more challenging and normally dedicated to a unique cylinder installation.

Spherical eye type

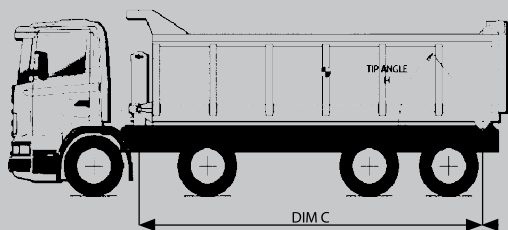


This variant of eye type will ensure that there is no bending stress imposed on the body and reduces cylinder side loading but it will allow more body movement under sideload conditions.

Decide the required tipping angle:

Edbro recommend for general mixed material tipping operations 48-50° with 45° as a minimum. Refer to www.edbro.com for a list of angles for specific materials (hyper link for web & memory stick versions).

Estimate the cylinder stroke:



$$\text{Approx stroke} = \text{Tip angle (H)} \times \text{Pivot length (Dim C)} / 59$$

Estimate the required body and payload:

Payload is normally estimated from the design capacity of the chassis and legal road requirements.

Maximum payload = body capacity $\times 1.5\text{t/m}^3 \times 1.5$ (50% if overload is anticipated).

Add body mass for the total load to be lifted.

- Refer to the catalogue pages to select a cylinder of the chosen type with sufficient stroke and tipping capacity.
For eye type, if the cylinder mounting centre A is too long for the body design, select a larger cylinder with more stages.
- When a suitable cylinder has been identified, a sales drawing can be requested from sales@edbro.co.uk.
If a suitable cylinder is not listed e-mail your application details to Edbro.