



Cam Mechanism Apparatus (SMT-TM-21)

Cam mechanisms are non-uniform translatable gears that help convert uniform rotating drive motions into non-uniform drive motions with or without latching. Generally speaking, cam mechanism consists of cams, engaging members and the frame. The desired movement path is defined by the geometry of the cam and produced by pressing a contour or a profile on the engaging member. The SMT-TM-21 unit is used to clearly demonstrate the function of a cam mechanism. Cams are available in different shapes. A roller plunger, flat plunger or cam follower can be used as the engaging member. The stroke is determined by measuring the travel. An angular scale indicates the corresponding angle of rotation.

TECHNICAL SPECIFICATIONS

Specifications:

- Function of cam mechanisms.
- 4 different shapes of cam: circular, arc, tangent, hollow or asymmetric.
- 3 different engaging members: roller, plunger, flat plunger or cam follower.
- Dial gauge for determining the stroke.
- Angular scale for determining the angle of rotation.

Technical Data:

- Angular scale:
 - 0 to 360°.
 - Graduation: 1°.
- Dial gauge for the stroke:
 - 0 to 25mm.
 - Graduation: 0.01mm.
- LxWxH: 160x160x300mm.
- Weight: approx. 7kg.



Experimental Data:

- Elevation curves in cam mechanisms
- Cams come in different shapes
- Circular arc, tangent, hollow, asymmetric
- Optionally with roller plunger, flat plunger or cam follower as engaging member