SCIENTICO INDIA
Manufacturer & Exporter · Ambala, Haryana, India

PRODUCT DATA SHEET
Catalogue reference for product evaluation

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Ratchet Mechanism | ProDynami 1374

Category: Theory Of Machines · **Order Code:** PRODYNAMI 1374 · **Country of Origin:** India

Product Overview

Ratchet Mechanism ProDynami 1374 demonstrates how ratchets limit rotary or linear motion to only one direction. This Ratchet Mechanism is composed of a round gear (or linear rack), a pawl, and a base, with tooth geometry featuring a ramp and sharp drop off to restrict reverse motion. The compact design needs only a small vertical wall to block movement in one direction. It is fitted on a Bakelite base board with rubber feet and is movable and easy to use.

View this product online: https://scienticoindia.com/product/ratchet-mechanism-prodynami-1374/



Request a model-specific quotation
Include quantity and delivery country.

Technical Specifications

Ratchet Mechanism ProDynami 1374 — Technical Specifications

Parameter	Value
Main Components	Round gear (or linear rack), pawl ("click"), base (or mount)
Gear/Rack Geometry	Ramp feature on one side of tooth, leading to sharp drop off
Function of Geometry	Restricts pawl motion when linear or rotational direction is reversed
Mechanism Size	Compact, only a small vertical wall needed to prevent motion in one direction
Base Board Material	Bakelite
Base Feet	Rubber foots
Portability	Movable, easy to use

Key Features

Key Features

- **Mechanism Type:** Ratchet Mechanism limiting rotary or linear motion to one direction
- **Core Components:** Round gear (or linear rack), pawl ("click"), and base (or mount)
- **Tooth Geometry:** Ramp feature on one side leading to sharp drop off
- **Motion Restriction:** Prevents motion when direction is reversed
- **Compact Design:** Small vertical wall sufficient to block reverse motion
- **Base Board:** Bakelite material

- **Base Support:** Rubber foots
- **Portability:** Movable and easy to use

Construction and Design

The Ratchet Mechanism ProDynami 1374 is composed of three main parts: a round gear (or a linear rack), a pawl (also called a "click"), and a base (or mount). The geometry of the gear or rack is designed with a ramp feature on one side of the tooth leading to a sharp drop off. This geometry restricts motion of the pawl when the linear or rotational direction is reversed. Most ratchet mechanisms are not very large, as only a small vertical wall is needed to prevent motion in one direction. The mechanism is fitted on a Bakelite base board with rubber feet. The apparatus is movable and very easy to use. This Ratchet Mechanism gives detailed information on the working of ratchet-based motion control.

Scope of Delivery

- 1 Experimental Unit
- 1 Instruction manual

Ordering & Delivery

- Send the product name, quantity, delivery country and destination with your enquiry.
- Production schedule, freight, payment terms and export documents are confirmed in the written quotation.

Frequently Asked Questions

Q: What is the Ratchet Mechanism ProDynami 1374 used for?
A: It demonstrates how a ratchet mechanism transmits intermittent rotary motion or permits a shaft to rotate in one direction but not the opposite, and explains the working of ratchet-based motion limiting.

Q: What are the main components of the ratchet mechanism?
A: A round gear (or a linear rack), a pawl (also called a "click"), and a base (or mount).

Q: How does the ratchet restrict reverse motion?
A: The gear or rack geometry has a ramp feature on one side of the tooth leading to a sharp drop off, which restricts pawl motion when the direction is reversed.

Q: What is the base of the apparatus made of?
A: The mechanism is fitted on a Bakelite base board with rubber feet.

Q: What does the scope of delivery include?
A: 1 experimental unit and 1 instruction manual.

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